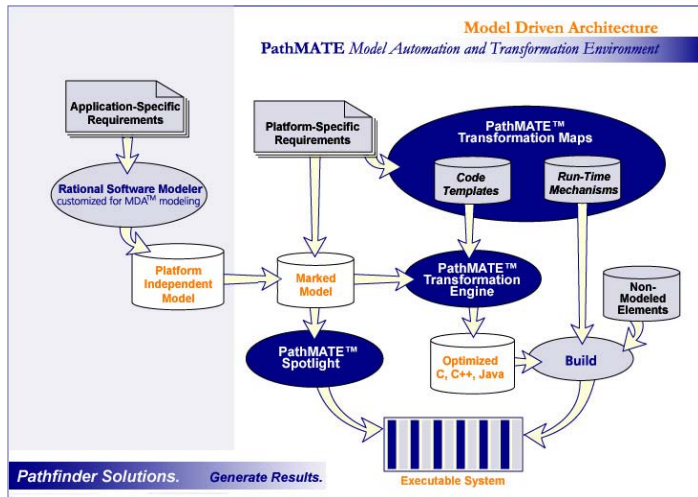


PathMATE™ for IBM Rational Software Modeler

Automate embedded software development with Model Driven Architecture® and PathMATE fully integrated with Rational Software Modeler and Rational Software Architect on Eclipse.

Manage risk with proven technology to develop your high performance system and still boost productivity with the latest advances including UML2, Eclipse, and the blockbuster IBM Rational Software Development Platform - use **PathMATE for Rational Software Modeler**.

Built on a decade of highly successful field use, PathMATE for Rational Software Modeler brings the proven power and flexibility of the PathMATE environment to Rational Software Modeler, the most advanced software modeling platform.



PathMATE for Rational Software Modeler transforms MDA Platform-Independent Models (PIMs) into optimized embedded C, C++ & Java. Fully integrated with Eclipse and the Rational Software Developer Platform, PathMATE is the most open and advanced environment for the development and deployment of high-performance systems.

“With PathMATE, I focus on high-level objectives, requirements and overall architecture, not memory management and I/O details—I’m much more informed and productive than I used to be.”

*Software engineer
Factory Control Solution Provider*

Fully integrated with Rational Software Modeler, PathMATE provides everything you need to:

- Create executable UML2 Platform Independent Models
- Automatically transform PIMs to efficient implementations
- Rapidly deploy your system to complex target topologies
- Debug and test your system in all target environments with PIM-level debug and automated test facility.

PathMATE delivers key strategic benefits:

Higher Developer Capacity

PathMATE automatically transforms UML PIMs into optimized embedded C, C++ or Java software. By moving development up-abstraction, PathMATE shifts the focus of development from code-centric to architecture-centric, enabling developers to maintain their product vision directly. *PathMATE customers have doubled development productivity within the first year and recorded 90% fewer defects at system integration.*

Implementation Consistency

In a team setting, code inconsistency can seem inevitable, negatively affecting maintenance, quality and performance. Through automation PathMATE makes the production of tight, readable and consistent code—including your project-specific implementation optimizations—a highly repeatable process. *Automated code generation improves system quality.*

Architectural and Platform Agility

PathMATE transforms your UML PIMs into high-performance deployable code. Rapidly change implementation language, platform and topology, leveraging the power of platform independence, while maximizing implementation efficiency. *PathMATE customers gain superior product agility as a strategic competitive advantage.*

Large-Scale Software Reuse

With PathMATE, you define component functionality once—in a PIM, and by separately adjusting model properties and deployment settings, you redeploy your system in different implementation languages, platforms and topologies, controlling a wide range of optimization tradeoffs. *Many traditional reuse limitations of hand-coding disappear, greatly enhancing your ROI and ability to respond to dynamic opportunities.*

PathMATE™ for IBM Rational Software Modeler Features

PathMATE's distinguishing features help customers produce the highest quality systems:

- **Most Configurable** - Easily control optimizations and topology of generated system
- **Most Open** - Integrates with leading UML environments & provides open transformation logic
- **Fastest** - Delivers quickest -turnaround iterative model development - edit/transform/build/test

Open Integration

- Integrates with popular UML editing platforms such as IBM Rational Software Developer and Rational Rose
- Model versioning & archival via leading change management systems
- Integrated with popular requirements management systems
- Eclipse 3.2 plugin architecture for full extensibility

Industry Standards Based

- Reference technology for the OMG MDA Model-to-Code standard
- Supports MDA Model Marking
- XMI data import
- Tracks emerging MDA Executable UML (xUML) standard

UML2 Modeling Support

- Architectural-level Domain Models/Packages and interfaces
- Classes, attributes, class operations, signals
- Generalization including polymorphism support
- Interface classes, realization
- Harel State Semantics including state entry and exit actions, transition actions and guards, composite states, pseudo states, and history
- UML2 Standard Action Semantics

Model Checking and Static Analysis

- Built-in model syntax, completeness and consistency checks
- Automated error correction
- Run-time performance, safety-critical, high-availability, and modeling consistency analysis (customizable for project-specific requirements)

Transformation Performance

- Generates > 50,000 SLOC/minute
- Fastest edit-transform-debug cycle for effective iterative development and testing

Architectural Configurability

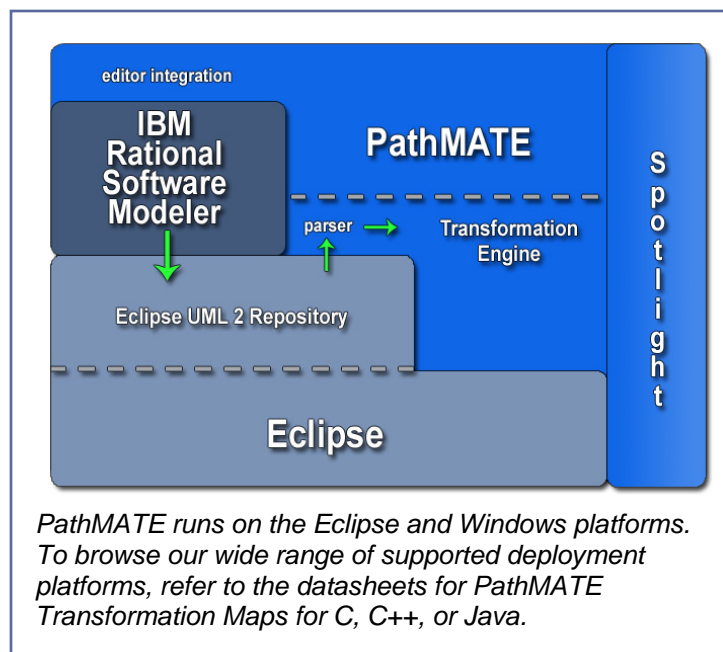
- Reconfigure across task & processor topologies for performance prototyping, varying product line configurations, etc.

Documentation & Report Generation

- Generates formatted Word documents
- Injects diagrams into generated target documentation
- HTML output for web-based collaboration and reference lookup
- XML output for open data interchange
- Rich document template library provides a range of reports, and starting points for custom reports

Product Support

- PathTECH on-line tech resource site
- MDA Mentor training & consulting
- Fully-executable sample systems



To access white papers, see demos or to request product evaluations, please visit www.pathfindermda.com