

# Agile enterprise application development with Compuware OptimalJ and SteelTrace Catalyze



Development teams must deliver quality solutions within both fixed time and resource constraints. These constraints demand tools and processes that address the individual needs of development team members while also allowing for an efficient exchange of information throughout the development life cycle.

The integration of Compuware OptimalJ and SteelTrace Catalyze provides superior support for agile enterprise application development practices through leading role-based functionality and streamlined collaboration techniques.

Using SteelTrace Catalyze and Compuware OptimalJ, development teams now have an integrated, role-based solution that provides superior functionality for requirements management and enterprise application development, while also providing realistic methods for sharing critical information within the application life cycle process. The resulting benefits of this integration include improved team productivity and deliverable software quality.

## Catalyze's benefits include:

- ▶▶ support for graphical and textual modeling for requirements capture and definition
- ▶▶ ease of use and adoption across the enterprise
- ▶▶ automatic generation and reverse engineering of comprehensive requirements documentation
- ▶▶ full customization of project templates, custom properties and requirements documentation
- ▶▶ full traceability between all types of requirements information
- ▶▶ scalability to support small efforts through large, enterprise efforts

## SteelTrace Catalyze: An overview

Catalyze provides a comprehensive platform for the capture, modeling and management of structured requirements. Catalyze allows for one semantic model of project requirements to be presented both graphically and textually so business, management, and technical team members can communicate with a common language and representation of requirements.

## Enabling requirements traceability within the development process

All development methodologies need to efficiently share requirements information within the software development process. In addition, to improve management of software maintenance activities, linking requirements to the delivered application functionalities and respective technical documentation (e.g., UML diagrams) is an absolute necessity. This traceability has been a challenge for organizations due to priorities and time constraints within the development process.

Consequently, some development tool solutions have attempted to address traceability through a tight coupling of requirements information with technical artifacts. While this coupling does provide traceability, the resulting overhead (e.g., source code files containing extensive requirements-based comments and synchronization challenges related to managing multiple assets) reduces team productivity.

The integration of Catalyze with OptimalJ recognizes the need to balance effective sharing of requirements information while not impeding development teams with unnecessary overhead. This integration is provided through:

- generation of use case information from Catalyze that can be automatically imported into the OptimalJ analysis-modeling environment. This information provides a foundation by which application development can proceed, particularly the development of further functional and technical models and application source code.
- traceability from the use case information maintained in the OptimalJ modeling environment back to Catalyze's detailed requirements repository. This maintains an effective separation between the tool and information management needs of the business analyst and developers, while ensuring that critical information can be shared between individuals and their environments.

### Enabling efficient model-driven development using OptimalJ

Leveraging the Object Management Group's Model Driven Architecture (MDA), OptimalJ uses UML models and transformations based on industry-accepted design patterns to generate fully functional J2EE application components, including integration to legacy technologies. Use case information provided from Catalyze allows architects, technical designers and developers to use OptimalJ's respective role-based versions to more effectively model and implement the appropriate application architectures and business functionality within their J2EE applications and, because the Catalyze repository can be consistently referenced as application requirements evolve, maintenance activities can be further streamlined.

### To Learn More

- Get a trial download of Catalyze at <http://javacentral.compuware.com/members/downloads/>
- More information on Catalyze can be found at [http://www.steeltrace.com/products\\_catalyze\\_suite.htm](http://www.steeltrace.com/products_catalyze_suite.htm)
- See demo of OptimalJ/Catalyze Integration: [http://www.steeltrace.com/integration\\_compuware\\_oj.htm](http://www.steeltrace.com/integration_compuware_oj.htm)

To learn more about OptimalJ, visit [www.compuware.com/optimalj](http://www.compuware.com/optimalj)

### Realizing the business value

- *Improved productivity in the development and application maintenance process.* The combined OptimalJ/Catalyze solution improves team productivity by reducing the time and effort necessary to share information in the development process.
- *High-quality applications.* Efficient communication clarifies the understanding of user requirements, assisting the development team with delivering high-quality applications.

## Compuware products and professional services—delivering IT value

Compuware Corporation (NASDAQ: CPWR) maximizes the value IT brings to the business by helping CIOs more effectively manage the business of IT. Compuware solutions accelerate the development, improve the quality and enhance the performance of critical business systems while enabling CIOs to align and govern the entire IT portfolio, increasing efficiency, cost control and employee productivity throughout the IT organization. Founded in 1973, Compuware serves the world's leading IT organizations, including more than 90 percent of the Fortune 100 companies. Learn more about Compuware at [www.compuware.com](http://www.compuware.com).

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