

# Revolutionizing Quality Assurance in Industrial Software Development with SmartDelta



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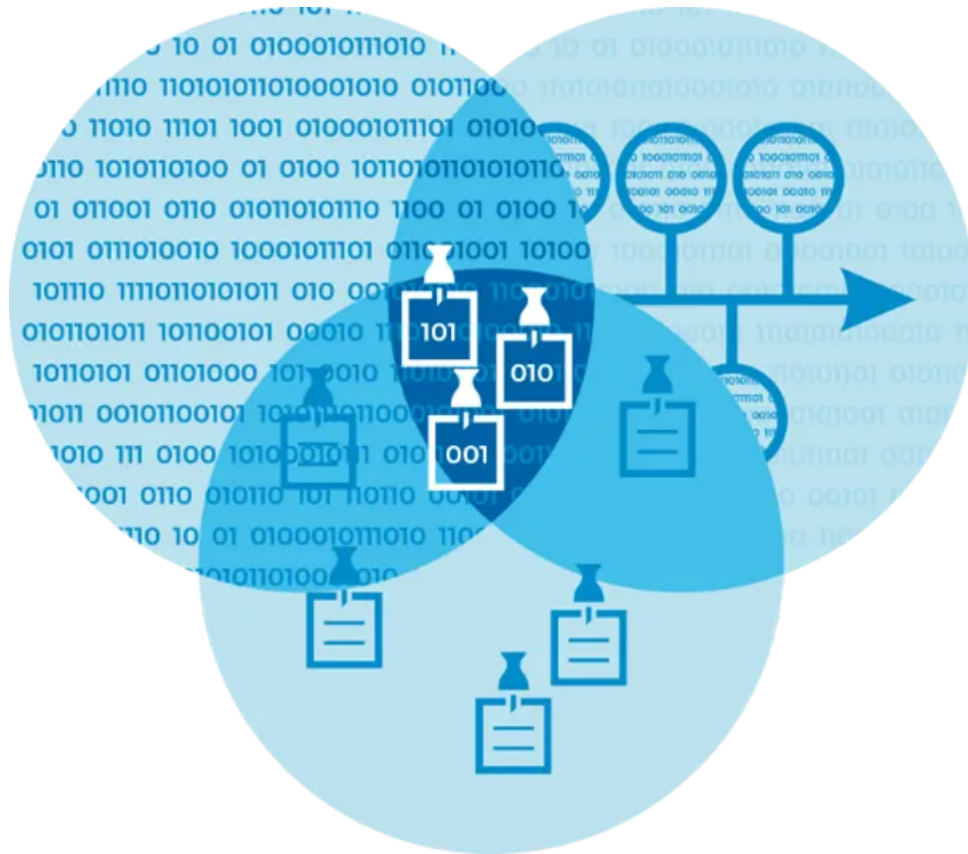
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Are you looking for ways to improve the quality of your industrial software? Look no further than **SmartDelta**! As software evolves and is updated with new features or deployed in different environments, its quality characteristics can change. This is a crucial factor for the long-term success of any company, especially in the competitive world of industrial software-intensive products. That's where **SmartDelta** comes in.

**SmartDelta** is a project that builds automated solutions for quality assessment of product deltas in a continuous engineering environment. Our tools and approaches include automated analysis solutions to identify and extract trends in quality, techniques to identify the features and design decisions causing quality degradation, static and dynamic verification and validation solutions, and automated reuse analysis and design recommendations for optimizing quality attributes like performance. We have attracted partners from various sectors and market domains, including the railway, telecom, logistics and mobility, FinTech and banking, cybersecurity, and enterprise software. Join us in revolutionizing quality assurance in industrial software development with SmartDelta.

On the other hand, **DETANGLE** is a tool that aligns the engineering of safety-critical systems with agile methods, allowing for more flexibility and adaptability. One of the main goals of this project is to enhance the **DETANGLE** tool while taking advantage of its capabilities. In SmartDelta Project, with the help of our tool, project managers and engineers can monitor the comprehensibility and error-proneness of their code and get an estimate of the effort needed to improve the changeability of less flexible code modules.

**DETANGLE**'s goal is also to identify patterns of system knowledge within and across teams and to reduce the main risks associated with these patterns. One major risk in software engineering is the right level of code ownership. Finding the right balance of code ownership is key to promoting a sense of personal responsibility and ensuring that errors are caught early on. **DETANGLE** helps identify and mitigate this risk by providing insights into patterns of code ownership and their impact on the comprehensibility and error-proneness of code. These important notions of the **DETANGLE** tool enables SmartDelta project's aims to become true.



SmartDelta project aims to improve the quality and automation of industrial software-intensive products, while also reducing the time and cost of verification, validation, and testing. Our project targets organizations that develop, test, and maintain software solutions, and aims to increase visibility, reduce risk, improve productivity, and speed up the time to market for new products and releases. SmartDelta also focuses on improving test automation processes and identifying and managing differences in quality without sacrificing speed. These improvements are expected to result in increased innovation, productivity, and profitability for partners and organizations using the project's outputs.

The project has a particular focus on **Product Line Engineering**, which involves the development of multiple variants of a product to meet the needs of different customers within the same product domain, and on testing and validation strategies for complex systems.

In summary, SmartDelta project that aim to improve the quality and safety of industrial software-intensive systems and focused on providing data-driven insights and recommendations to help software engineers build high-quality, safe systems. SmartDelta provides automated solutions for quality assessment and optimization, while DETANGLE helps bridge the gap between safety and agility by aligning safety-critical systems with agile methods. Don't let subpar quality hold your system back — try SmartDelta today!

Software Development

Software Product Lines

Data Driven

Quality Assessment

Industrial Software