MITRE's Technology Transfer program was established in 1999 to place MITRE-developed technologies in the hands of commercial companies that can make them available to our sponsors and the public as supported, affordable products. Working on critical issues of national importance, MITRE continues to develop new and innovative technologies.

Software Quality Assurance Evaluation (SQAE)

As software progresses through the Software Development Lifecycle (SDLC) there is a greater need to focus on the fundamental software architectural issues of reliability, stability, evolvability, portability, and maintainability at all stages of development.

Software teams can no longer afford to focus simply on building functionality and removing errors; the fundamental software architectural issues of reliability, stability, evolvability, portability, and maintainability are key to an organization's capacity to survive and thrive. It is estimated that 80% of a program’s lifetime costs occur in the maintenance phase of the SDLC. Reducing your maintenance issues, and costs, while improving your reliability during the earlier development stages, allows you to focus more on new feature development and faster times-to-market.

MITRE has developed a Software Quality Assurance Evaluation (SQAE) methodology and framework geared specifically to providing insights about software quality from a comprehensive, life cycle engineering perspective. The SQAE methodology is designed to be tailored to the specific context and needs of an organization, while maintaining a comprehensive perspective on the risk areas in software-based systems.

The SQAE capitalizes on industry and government open-system standards, MITRE’s past work and experience in conducting over 200 assessments in this area, and modern software reverse-engineering analysis tools and code assessment technologies. The SQAE has been applied to more than 100 languages and over 220 million lines of code.

Applications and Benefits

- Software systems engineering, Software development
- Quicker response time for risk notification
- Use in more than 100 languages
- Tailored to specific business needs

Additional Information and Links

