

# Mosaic's Test Automation Architecture

The need to regression test large mission-critical systems quickly and thoroughly is a fact of life in business today. While automation tools have improved significantly over the years, most organizations have had trouble realizing the benefits of automation. The primary reasons for this include:

- Lack of a well-defined testing and test automation process.
- Inadequate tool expertise.
- The difficulty and expense of maintaining a regression test bed.

The bottom line is that it is all too easy to automate in ways that are difficult and expensive to maintain.

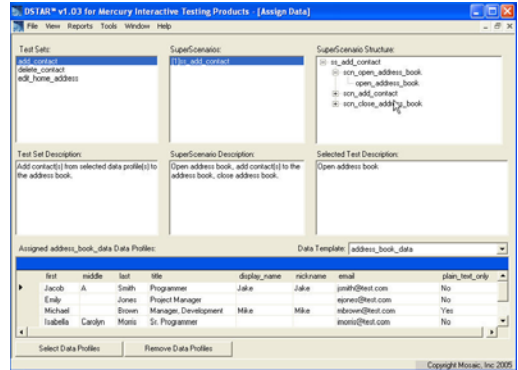
## Comprehensive Solution

Effective, maintainable automation requires more than tools. It requires a comprehensive approach that addresses all the factors that are needed for success. Mosaic has that approach based on experience gained on literally hundreds of projects by our consulting staff. The approach is practical and proven, and it can be implemented with any of the industry's test automation tools. Key components include:

- **MSTAR<sup>®</sup>**: The most comprehensive testing methodology in the industry. MSTAR<sup>®</sup> provides a requirement-based, risk-focused and measurable testing process field-proven across industries and technologies. To address the risk management needs of today's critical applications, MSTAR<sup>®</sup> includes a test automation architecture that integrates the manual testing seamlessly with test automation.
- **MSTAR<sup>®</sup> add-ons for specific automation tools**: Add-on repositories provide specific guidance for implementing Mosaic's test automation architecture in various toolsets. For example, our Mercury add-on provides detailed guidelines for Mercury Quality Center.

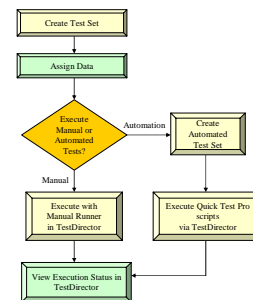


- **DSTAR™:** Mosaic’s data profile manager manages your test data as a reusable and maintainable asset for both manual and automated testing. It interfaces with Quality Center for Mercury users or Mosaic’s test planning tool, Object Profile Builder™ for non-Mercury users to manage and track the assignment of test data to reusable tests.



- **Training:** Mosaic can train your staff in both how to test and how to automate. And we can support the training with hands-on mentoring and ready access to best practices.

Test Execution Workflow



- **Testing and Automation Support:** Our consultants understand both testing and test automation. With Mosaic, you get not only expert support testing your critical projects, but also experienced professionals who will transfer knowledge to your staff.

## Key Benefits

### Reduced Testing Costs

Mosaic’s approach reduces costs in a number of ways:

- Scenarios, data profiles, and automation scripts are all designed to be reusable. This significantly reduces maintenance costs.
- Mosaic’s architecture provides a seamless transition from manual tests to automated tests. This significantly reduces the work required to automate manual tests.
- Mosaic’s architecture reduces the need for expensive tool experts.

### Improved Testing Effectiveness

Mosaic’s requirements-driven risk-oriented approach to testing is designed to focus effort where it will have the most benefit.

### Improved Regression Testing

Mosaic’s testing approach is designed to ensure flexible, repeatable regression tests.

Consistent, High Value Consultants	Because we specialize in testing and test automation, our consultants benefit from Mosaic's collective corporate knowledge and Mosaic's intellectual property. Our consultants transfer knowledge to our clients during projects to foster our clients' ongoing success.
Improved Management Control	The comprehensive, consistent testing approach defined by MSTAR <sup>®</sup> provides the controls, guidelines, deliverables, and metrics to efficiently test even the highest risk, mission-critical systems and give management visibility into the progress and effectiveness of the testing effort.
Tool Independent Automation Architecture	You can change your tool without changing your automation architecture.

## Who Can Benefit from Mosaic's Automation Architecture?

- Anyone using test automation tools.
- Anyone interested in test automation in the future.

## About Mosaic, Inc.

Mosaic, Inc. was established in 1988 and is headquartered in Chicago. Mosaic is dedicated to helping its clients reduce the risk of developing and maintaining complex software systems. We focus on solving the problems of delivering high quality software on time and at an affordable price.

Our clients are large organizations from a wide variety of industries. Our testing consultants are seasoned, hands-on professionals who understand the pressures faced by today's software developers and project managers.

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