

Connecting The Dots: Planning and Managing an End-to-End Systems Integration Test

A 3-Day Interactive Course

Systems Integration Testing differs in many essential ways from the test of a single application. The test manager must deal with many systems, platforms, teams, test environments, datasets, and stakeholders. System test techniques won't address the integration risks. Most testers don't know how to design scenario-based tests. There are unique requirements for communication among players and control of environments and data.

For both test manager and testers a big integration can seem like an overwhelming challenge—with potential for logistical nightmares and a quality disaster. But it doesn't have to be. With key management strategies and a solid grasp of scenario modeling techniques, you and your team can craft a manageable and successful End-to-end Systems Integration Test.

This course is built around answering the questions:

- With limited time and budget, what do you really need to focus on to succeed?
- Where do you start?
- How do you break the work into manageable tasks?
- How do you construct your test strategy with the right focus to address the integration risks?
- How can you gain and maintain widespread stakeholder acceptance for your strategy and plans?
- How do you plan and staff the test?
- How will the test team develop test scenarios that are rigorous without overkill?
- How can you manage test execution without driving yourself and everyone else crazy?
- What useful information can you provide to keep management informed, and still allow yourself time to manage the testing?
- How do you satisfy Audit or your internal QA department?

The 3-day course is primarily interactive, with participants working in groups on exercises designed to teach the practical skills needed to conceptualize, plan, manage and conduct a systems integration test that addresses the integration risks of a fictitious large project. The exercises are supplemented with course notes, sample deliverables, and useful tips from the instructor's extensive real-world experience. Throughout, we will discuss strategies and techniques for forestalling and dealing with issues when we have less-than-perfect conditions for our test.

Intended Audience

This course will benefit anyone who needs to know how to test, or manage the testing of, integrated systems, including QA/Test Managers, Testers, and Project Managers.

To ensure an in-depth participatory learning experience for all, each class is limited to 25 students.

The Instructor

Fiona Charles is the president of Quality Intelligence Inc., a Toronto-based company offering test project management, workshops and consulting. With over 25 years experience in software development and integration projects, she specializes in test program management on multi-project programs, and in managing and teaching large-scale systems integration testing for clients in retail, banking, financial services, and telecommunications.

Fiona is on the board of the Toronto Association for Systems and Software Quality, an alumna member and periodic moderator of Gerald M. Weinberg's Shape Forum, and co-founder and organizer (with Michael Bolton) of the Toronto Workshop for Software Testing, an annual invitational conference for senior test practitioners. She is a frequent contributor to stickyminds.com and Better Software magazine, and presents regularly at conferences on test management topics. Fiona is currently writing a book on managing an end-to-end systems integration test.

Course Outline

- 1. Introduction to End-to-end Systems Integration Testing**
 - The problem of “many”
 - Big-picture thinking
 - Control vs. flexibility
 - Communication
 - Conceptual model for the test
- 2. Getting started**
 - Nailing the critical success factors
 - The discovery process
 - Scope and boundaries
 - Entry and exit criteria
 - Basics to get in place
- 3. Test project management**
 - Test manager's role
 - Staffing your team
 - Test project plan
 - Determining risks
 - People relationships and network
 - Test strategy
- 4. Test design and development**
 - Modeling the test
 - Scenarios
 - Test artifact design for flexibility and auditability
- 5. Environments and Data**
 - Tools
 - Environment strategy and plan
 - Data strategy and plan
- 6. Test execution**
 - Structuring the test day
 - Building flexibility into the Execution Plan
 - Coordinating execution
 - Publishing plans and expected results
 - Daily progress meetings
 - Bug management
 - Change control
- 7. Management reporting**
 - Building to readiness for test
 - Tracking systems readiness
 - Designing measures that reflect reality
 - Test execution reporting
- 8. Gaining acceptance**
 - Identifying acceptors
 - Managing acceptance
- 9. Last things**
 - Summary
 - Where to go from here

Contact Information

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