

Issue  
**19**

# THE **TESTER**

**March 2007 Issue**

## **NEXT CONFERENCE**

**Tuesday  
13 March 2007**

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- Reviewing UML for Testability
- Agile Development Needs You
- Leveraging the BA and TA Skills
- The Test Data Challenge
- Lessons Learned from the Great Testers of our Time
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Please note that any views expressed in this Newsletter are not necessarily those of the BCS.

## FROM THE EDITOR

Well, that was an interesting audience participation session with Neil Mullarkey at December's meeting – and we really got to know our neighbours in the practical exercises to promote new approaches to communication in the workplace!

For our next Conference on Tuesday 13th March Lloyd Roden has assembled a very full and interesting programme with three parallel sessions for a large part of the day so you have plenty of choice, with several sessions geared towards Agile development.

In this issue of The Tester, Peter Morgan is trying to encourage more members to present papers or write articles of a practical nature about testing project experiences. We welcome your input.

Marty Cunnington has put pen to paper again with a sequel to his daily experiences working in Quality Assurance! Does this reflect your working day as well?!

I hope that you will print out a copy of The Tester and place it on your notice board or coffee table etc at work to spread the word about our conferences!

As always, please book early so that you can guarantee a place with us in March!

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**BCS SIGIST website:** [www.SIGiST.org.uk](http://www.SIGiST.org.uk)

**SIGIST Standards Working Party:** [www.testingstandards.co.uk](http://www.testingstandards.co.uk)

**SIGIST UML Testers Forum:** [www.umltesters.org](http://www.umltesters.org)

## FUTURE SIGIST CONFERENCE DATES

**13 June 2007**

**19 September 2007**

**13 December 2007**

## BOOKING INSTRUCTIONS

1. Download a booking form from:  
<http://www.SIGiST.org.uk/bookingForm.pdf>

**FAX TO:**

Phil Dyson  
01793 417444

**OR POST TO:**

Phil Dyson  
Specialist Groups Officer  
First Floor, Block D  
North Star House  
North Star Avenue  
Swindon  
SN2 1FA

## NEXT MEETING – PROGRAMME

### BCS SIGIST – Agile – Your Flexible Friend

Tuesday 13 March 2007

Royal College of Obstetricians and Gynaecologists, 27 Sussex Place, Regent's Park, London NW1

08:30	Coffee & Registration, Exhibition opens		
09:25	<b>Introduction and Welcome</b> <i>Stuart Reid, SIGIST Chairman</i>		
09:30	<b>Featured Speaker</b> <b>Agile Retrospectives – Making Good Teams Great</b> <i>Esther Derby, Esther Derby Associates, Inc</i>		
10:30	Networking session and commercial break		
10:45	Coffee & opportunity to visit the exhibition		
11:15	<b>Agile Development Needs You</b> <i>Kevin Rutherford, Rutherford Software</i>	<b>Featured Speaker</b> <b>Workshop:</b> <b>Agile Retrospectives – making them work</b> <i>Esther Derby, Esther Derby Associates, Inc.</i>	<b>Workshop:</b> <b>Reviewing UML Analysis Models for Testability</b> <i>Richard Warden, Software Futures Ltd</i>
12:00	<b>Mini-Track</b> <b>Leveraging the BA &amp; TA Skills</b> <i>Jenny Martin, Loyalty Management Services</i>		
12:20	<b>Mini-Track</b> <b>The Test Data Challenge</b> <i>Dave Royle, CapGemini</i>		
12:45	Lunch & opportunity to visit the exhibition		
13:45	<b>Lessons Learned From The Great Testers Of Our Time</b> <i>Clive Bates, Grove Consultants</i>	<b>Workshop:</b> <b>Agile Testing in Practice</b> <i>Kevin Rutherford, Rutherford Software</i>	<b>Workshop:</b> <b>Reviewing UML Analysis Models for Testability (continued)</b> <i>Richard Warden, Software Futures Ltd</i>
14:30	<b>Model Based Testing</b> <i>Matt Archer, FMI Solutions</i>		
15:15	Tea & opportunity to visit the exhibition		
15:45	<b>Featured Speaker</b> <b>Congruent Feedback</b> <i>Esther Derby, Esther Derby Associates, Inc</i>		
16:45	Closing Remarks		

The SiGiST committee reserves the right to amend the programme if circumstances deem it necessary.

Workshops will have limited places, to avoid disappointment try to book in advance.

## ANNOUNCEMENTS

### **SIGIST Library**

Looking for a testing book but not sure which topics are covered? Or are you trying to decide which testing book to buy? Or do you simply want to increase your testing knowledge? If the answer to any of these questions is 'yes' then the SIGIST Library could help!

The SIGIST Library has lots of testing books covering a variety of topics and they are available to borrow for a period of 4 weeks - free of charge. Extended loans are allowed as long as the book has not been requested by another SIGIST member.

Topics include (amongst others) Requirements testing, Reviews/Inspections, Test Management, Techniques, Test Process Improvement

If you would like to know more about the library and books available, or for any queries, please contact Julie Gardiner on 07974 141436 or email her at [gardinerjulie@yahoo.co.uk](mailto:gardinerjulie@yahoo.co.uk). Alternatively, download the book loan form on the SIGIST website [www.SIGiST.org.uk](http://www.SIGiST.org.uk). Happy Reading!

## **WE ALL HAVE A STORY TO TELL, AND I NEED TO HEAR YOURS**

If you have worked on a software project for more than 3 months, or have worked on more than one project, then you probably have a story to tell. In case it has escaped your notice, experience is one of the best teachers available. Whereas personal experience is a good tutor, we can all learn from the path others have taken. That's the reason to appeal for your story.

"Hold on", I hear you saying, "surely there are lots of people out there who can create a good PowerPoint presentation, and/or have written books on Testing". That is true, but you are a unique individual, and there is no-one who has trodden the same path. There are lots of really good talks at conferences, and articles on software testing on the web, but we all need to hear from coal-face workers, who have a story to tell, and a passion with which to tell it.

I call some of those who write and speak about testing 'the professionals'; they are regulars on the speaking circuit, and often work for a test consultancy, or for a training provider. These people have got significant things to say to us all, and we can all benefit enormously from their input. My debt of gratitude extends not just to those from the "Testing Hall of Fame", but to the people who have taken time to teach me from their experience over a lunch-time walk, or a chat around the coffee machine.

Along the testing career path, some of what I have done has worked well, and some things have been dreadful. If I have had a disaster, it has been painful. I would rather that the painful lessons are shared, to help others avoid the same pitfalls, and learn from my experience. My pain is lessened by your gain!

There are several things you can communicate in a presentation at SIGiST, or article in 'The Tester'. Although not always at the same time, I am looking to be:

1. Inspired
2. Encouraged
3. Provoked
4. Warned
5. Taught

I still remember a testing friend remarking how he deals with totally missing requirements: he writes what he sees as requirements, and plays them back to the business. Sometimes, he will deliberately indicate that a list is displayed on screen in post-code order, when this is totally inappropriate. The reaction he is looking for is to get the business to say that this is wrong, and indicate what the correct order should be. This from business representatives who previously had no time to define requirements!

I hope that this example indicates that a little snippet can have a massive personal impact on friends and colleagues in the larger testing community. Your story may be about how to turn the theory that you have heard into practice, to make a real difference. Some of 'the professionals' began their path to being a regular presenter by sharing their small story, and for them, the rest is history. I need to hear your story. For you, it might just be the beginning!

Peter Morgan

Peter Morgan is a freelance tester. He can be contacted by e-mail at [morganp@supanet.com](mailto:morganp@supanet.com), and would be honoured to help you clarify your thoughts for wider distribution. However, he is no PowerPoint expert!

If you would like to present a paper at the SIGiST (for 20 or 40 minutes) please contact:

Lloyd Roden                      [lloyd@lloydoden.demon.co.uk](mailto:lloyd@lloydoden.demon.co.uk) OR  
Pam Frederiksen                [pam@leysen.com](mailto:pam@leysen.com)

## ABSTRACTS AND BIOGRAPHIES

### Featured Speaker:

#### **Esther Derby, Esther Derby Associates, Inc Agile Retrospectives – Featured Presentation**

##### **Abstract**

Project retrospectives help teams examine what went right and what went wrong on a project. But traditionally, retrospectives (also known as "post-mortems") are only help at the end of the project--too late to help.

In organizations where teams develop using iterative, incremental methods, Agile retrospectives at the end of each iteration or increment stimulate continuous improvement throughout the project. Exceptional software process and project improvement grows out of solid data and good planning.

Esther Derby, co-author of Agile Retrospectives: Making Good Teams Great, will introduce you to a framework for effective retrospectives, provide tips and pointers for sustaining interest in retrospectives throughout the project, and suggest ways to maintain the relevance of improvement to the work of your team.

##### **Biography**

Esther Derby is well known for her work in helping teams grow to new levels of productivity and coaching technical people who are making the transition to management. Esther started her professional career as a programmer and now focuses on interpersonal, group, and organizational dynamics.

Esther is co-author (with Johanna Rothman) of Behind Closed Doors: Secrets of Great Management. Her latest book is Agile Retrospectives: Making Good Teams Great, which she wrote with Diana Larsen. Esther is one of the founders of the Scrum Alliance and has an MA in Organizational Leadership.

Her articles have appeared in Better Software, Software Development, CrossTalk and on-line at stickyminds.com, scrumalliance.org and ayeconference.com.



#### **Agile Retrospectives – Featured Workshop**

##### **Abstract**

In this hands-on workshop, we'll build on the concepts covered in my talk about Agile Retrospectives. We'll do a short project, participate in a retrospective and discuss what happened during the retrospective and how the parts fit together.

**Kevin Rutherford, [www.rutherford-software.co.uk](http://www.rutherford-software.co.uk)**

## **Agile Development Needs You!**

### **Abstract**

These days more and more software development organisations are adopting “agile” or “lean” methods. Implemented properly, this means a significant shift in roles, responsibilities and attitudes for everyone concerned in the software lifecycle – including testers. For example, “extreme programmers” now practice Test-Driven Development, and some have even said that agile teams no longer need testers!

I'm here to tell you that the opposite is true. Agile teams need testers more than ever, because quality is one of the cornerstones that makes the transition to agile effective. The Agile Manifesto states, among other things, a preference for “working software over comprehensive documentation.” Today we'll discuss the importance of that one word – working – and its role in the overall process of developing software.

Topics covered in this session will include:

- Does testing have the same objectives on an agile project?
- Do agile testers need to learn new skills and tools?
- Does agile development require fewer testers?
- What role(s) can testers play in the organisation's transition to agility?



## **Agile Testing in Practice - Workshop**

### **Abstract**

We expect that Kevin's earlier talk will generate a lot of talking points. This follow-up session will therefore be your opportunity for further discussion with Kevin, and will be driven entirely by your questions:

- Explore the expanded role of testers in an agile organisation
- Examine the agile lifecycle, and the timing of various kinds of testing
- Dig deeper into the lean concept of “mistake-proofing”
- Discuss the pros and cons of tests as specifications
- Learn what life could be like with no bugs database
- If we have time, see a brief demonstration of Test-Driven Development using tools such as FIT/FitNesse and xUnit
- ... Or anything else that concerns or interests you!
- The course of this discussion will be entirely up to you!

### **Biography**

Dr Kevin Rutherford is an independent practitioner with twenty-five years' experience in software development, including twenty years in leadership and project management roles. Kevin is a **Chartered Engineer**, a **Certified Scrum Master** and a **Chartered IT Professional**. He has spent the last ten years coaching software development teams to increased productivity and responsiveness through the adoption of agile principles and practices, including test-driven development.

During the same period Kevin has been a leading speaker on the agile conference circuit. This has included conducting workshops, tutorials and simulations at leading industry gatherings such as XP2000, SPA2006, AgileNorth 2005 and various XPdays around Europe. He has also run workshops as invited speaker at numerous events of the British Computer Society and the Agile Alliance.

Kevin's blog (<http://silksandspinach.net>) is ranked in the top 25 among all agile blogs worldwide ([technorati.com](http://technorati.com), July 2006).

## **Jenny Martin, Analysis and Testing Manager, LMUK**

**Leveraging the skills of business analysts and test analysts** – how running the two teams together can drive quality up the development life cycle and maximize efficiency

### **Abstract**

Running Analysis and Testing teams together can drive quality up the development life cycle and maximize efficiency.

Whether using the V Model approach or Agile techniques, we all agree that the earlier test analysts get involved in a project the better. When running both teams together it is easy to manage the involvement of testers early. You can put a BA and a test analyst on a project during the initial requirements gathering phases and the synergy effect of 2 systems experts working together (with a slightly different approach) serves to increase the quality of the deliverable and also facilitates healthy knowledge transfer between the teams. Both teams have similar skill sets and are business facing, so they naturally work well together, they even have transferable skills and can change roles if looking to broaden their experience. Techniques and processes to improve quality and time to market i.e. risk based testing, agile methodologies are relevant to both teams and the shared understanding of each other's discipline gives a new insight to each role. As a manager, running business analysis and testing together ensures early visibility of projects and creates efficiencies in team management and planning activities. For example, metrics captured in business analysis phases i.e. no of use cases, function points, no of requirements etc. can help estimate testing activities more effectively and subsequently drawing on historical metrics for both areas further improves the process.

Since Business Analysis and Testing activities are business facing, independence from development teams is still maintained. Working alongside a manager responsible for design and development imposes a natural quality check point for each hand off between analysis – design and development – test. On Project Boards the development manager can take the role of Senior Supplier representing the development activities whilst the Analysis and Testing Manager if appropriate can take the role of Senior User representing the business and chair User Forums etc.

### **Biography**

Jenny is responsible for all business analysis, systems analysis and testing activities within LMS. She has 10 years of experience working with and managing cross-functional teams to deliver complex IT systems in the finance, utility and loyalty sectors. She holds professional qualifications in ITIL, ISEB Test Management, PRINCE2 and SAP.

Jenny joined Loyalty Management as Test Manager in 2003 and has been instrumental in all major projects since that time. She has built a team of experienced, professional testers and developed robust methodologies, testing techniques, tools and processes in adherence with recognised British Standards. Under her leadership, LMS has created an outstanding record of successful project delivery and the seamless deployment of new systems.

Prior to joining LMUK, Jenny worked for six years as a consultant for Perot Systems. During this time Jenny had various international assignments, including managing testing for large scale multi tier implementations (Bank of Ireland) and leading analysis activities for ERP projects (CedelBank, Luxembourg). In her career at Perot Systems, Jenny was one of only 16 selected company wide to participate in Perot System's challenging Engineering Development Program.

Jenny has a Bsc Hons Degree in Psychology from Portsmouth University.

Outside work Jenny is an accomplished hill and distance walker and has undertaken many challenges for charitable causes, including the 'three peaks challenge', the 'Moonwalk' London speed walking marathon and a sponsored 35 mile walk across the North York Moors.



## Dave Royle, CapGemini

### The Test Data Challenge.....Enterprise Test Data?

#### **Abstract**

One key aspect to effective testing is the test data used, the more 'representative' system generated the data is the more confidence in the tests executed & the outcomes produced.

There are numerous sources of data:

- Existing systems
- Data migration/system conversions
- 3<sup>rd</sup> parties (e.g. addresses via PAF, company details via BvD)
- Tools (e.g. FileAid)
- Manual creation/amendment (e.g. insert into.....)
- System/Application generated
- Live data (security & data protection consideration, sanitised/masked as appropriate)



Depending on the stage of testing, the source of the data should (will) be different:

- Component Test – Tools, Manual creation, conversions.....
- Component Integration Test - Tools, Manual creation, conversions.....
- System Test – System/Application, data migration/conversions.....
- Inter System Integration Test - System/Application, data migration/conversions, 3<sup>rd</sup> parties
- Acceptance Test - System/Application, data migration/conversions, 3<sup>rd</sup> parties, live

Depending on your systems, business areas, complexity (technical & business), interfaces, dependencies on external systems – will affect how you define, maintain & get best use (re-use) from test data.

#### Case Study – Enterprise Test Data

Background – 20+ national/corporate systems, 50,000+ user population, regional & national basis, the same data exists in many of the systems → target to create 'single source' data items/entities that all systems use/re-use. Explain systems/technology, databases/stores, interfaces, complexity (especially while migrating to target & 'in limbo') & 'management of test data' process & use/re-use across multiple test teams.

#### **Biography**

Dave is currently Lead Assurance and Test Authority for the test community within CapGemini. His role means he is responsible for approximately 500 staff. Dave has currently over 20 years experience in IT, 15 years have been specialising in Test Domain.

Dave has experience in the full development lifecycle: Business Development, Architecture, Analysis and Design, Development, Testing, Release Management, Implementation, Support, Environment Management, Systems programming, Networks. All test stages, disciplines, techniques, functional, non-functional, system migration, infrastructure and data

## Richard Warden, Software Futures

### Reviewing UML Analysis Models for Testability - Workshop



#### **Abstract**

You are a systems testers and you have just been given a UML analysis model to review. What do you do next? Find the nearest shredder or sit down and try to make sense of it? Do you read the use cases and others model looking at general areas such as traceability, completeness, correctness and consistency? Or are there more specific things you can do? This workshop introduces a two-fold approach to UML reviews based on guidelines we have developed in recent years.

Firstly, decomposing a significant set of requirements into a use case-based model is neither trivial nor easy. Analysts need to exercise skill in determining a good decomposition that will lead to two outcomes – enable a sound design that will lead to a good implementation, and produce a testable model that enables a high degree of test coverage appropriate to the risks. The first set of guides describe characteristics of good and bad analysis models that we can look for during reviews, and the associated testability issues. For example, poor use case decomposition can make it difficult or impossible to identify the proper pre and post conditions that should apply to a piece of functionality.

Secondly, we can use well-known test design techniques, such as those taught in ISEB/ISTQB training, to examine the behaviour described in more depth. For example, a Sequence Diagram shows the interaction between actors, processes and domain objects. We can examine it having identified the input and output equivalence partitions to see if all the necessary behaviour is described. Another example is event-based systems, where actors and objects can have a variety of states as the processing proceeds. Use cases and supporting models can be reviewed to determine whether the states, the events causing changes of state and the actions that occur on changing state are described. As a final example, many problems we have seen arose through errors of omission, where the analyst did not think sufficiently about all the possible combinations of inputs and outputs. Applying decision tables is a long-standing technique for examining their relationships and checking if anything has been overlooked.

We know the importance of effective reviews cannot be over-stressed, as they are our primary method of finding and removing faults early in the lifecycle. Bitter experience has shown that faults in important and high-risk analysis models can be devastating if allowed to progress undetected until the very late stages of test running or, worse still, to live operation. The aim of the workshop is to give delegates sufficient knowledge and confidence to rejoin their projects the next day and make a valuable contribution to reviews. In practical terms you will be given a set of review guidelines that you can use during the workshop and take away and adapt to your projects. While we have case history examples, we strongly encourage delegates to bring along examples of UML or instances of problems so they can be included in the discussions.

#### **Biography**

Richard is an independent IT consultant who has worked in the industry for more than 30 years. He started life as an analyst, systems designer and programmer on large RAF mainframe systems followed by the higher levels of testing and commissioning. During his time he has led programming teams, developed and run test teams, served time as a project leader, and he set up and managed his first review process while a quality manager with Racal Electronics (now part of Thales). Richard first came into contact with UML by chance in 1997 when, to his surprise, he was asked to be test manager for a new UML-based trading system for the Swiss Exchange. He was told the fact that he knew nothing about UML or financial trading systems was irrelevant – it was the testing bit they needed! Since then Richard has developed and delivered UML training and consultancy to a range of clients. As a developer at heart, but with an enormous affection for testing, Richard sees his work these days as helping build bridges between the different groups within a project team. He is the founder and chairman of the UML Testers' Forum, which is affiliated to the SIGIST, and also an accredited ISEB/ISTQB tutor. His company website is at [www.softwarefutures.ltd.uk](http://www.softwarefutures.ltd.uk) and the Forum can be found at [www.umltesters.org](http://www.umltesters.org)

## Clive Bates, Grove Consultants

### Lessons learned from the great testers of our time

#### **Abstract**

What can today's software testers learn from present and past testing masters, many of whom have put their own lives on the line to make amazing contributions to the world in which we live?

Clive is thinking about serious testers such as Chuck Yeager, Yuri Gagarin, Andy Green, Leonardo da Vinci, and Isambard Kingdom Brunel. Isambard Kingdom Brunel was one of the greatest engineers in British history. A designer of bridges, tunnels, viaducts, docks, and ships, Brunel constantly battled resistance from established authorities, lack of adequate funding, changes in requirements, and project delays. In researching the achievements of past testing masters, Clive has identified important traits and characteristics that made them successful. If we acknowledge and adopt these traits in our lives, we may become more successful in our work.



- The testing secrets of masters in other disciplines
- How to adopt their practices to your work
- Embrace their enthusiasm and courage to promote innovation

#### **Biography**

Clive has been with Grove Consultants since 2002 having previously held various test management positions. Clive's experience covers testing and test management in a variety of areas such as banking, insurance, retail supply chain systems and internet applications. This has resulted in him gaining practical experience in managing the testing from multiple dependant projects to time critical systems, as well as a high degree of practical experience in both functional and non functional testing. Clive has also undertaken a number of testing assignments at client sites assessing existing test practises. This has included reporting on appropriate improvements and providing ongoing support during the implementation of recommended changes and facilitating at post testing reviews.

Clive has presented at the leading testing conferences over a number of years namely the International Testing Automation conference Washington, StarWest, StarEast and EuroStar as well as smaller specialist testing conferences in the UK, Sweden and Holland. He has also contributed articles in various magazines and journals including Better Software.

Clive is one of the founder members of the board that developed the original ISEB/ISTQB Foundation certificate and ISEB Practitioner certificate and is still fully involved with ISEB. In 2006 Clive was on the program committee for the EuroStar conference held in Manchester. In any spare time he has, Clive is a water-ski instructor and qualified ski boat driver at the British Disabled Water-ski Association.

## Working with Model-Based Testing

Matthew Archer, **fmisolutions**

### **Abstract**

This talk will share our story of introducing model-based testing, the challenges we faced along the way and how it delivered many unexpected benefits. In the beginning, model-based testing was little more than a buzz word. A new approach that was sporadically applied, but as we later discovered, rarely used to its full potential. Two and a half years later, I am proud to say it has changed our lives as testers.

Model-based testing brought with it a universal language that increased communication to an all-time high, not just with the developers, but with the entire project team. Yes, it made us better testers, but above all, model-based testing played a central role in achieving a long running team goal. That goal was to foster a culture where testing is seen as an indispensable part of any project that creates, customises or configures a piece of software. A culture where testing is integrated throughout the entire project and is supported by the understanding that software quality is the responsibility of everyone.

Model-based testing is here to stay. I can not envisage a future without it. Hence, this talk will provide the audience with a pragmatic guide to introducing model-based testing, the difficulties they can expect to encounter and our recommended solutions. The talk will begin by providing the audience with an overview of the models and associated diagrams we selected to support the different levels of testing, from Unit, through System, to User Acceptance. This is where we encountered our first challenge. The talk will discuss the model selection process and stress why selecting models is a task that must involve the entire project team.

Our final selection consisted of UML Activity, Use Case, Class and Sequence diagrams contained within a Business Model, a Requirements Model and a Design Model. Each model will be briefly discussed to highlight their simplicity and dispel the stigma that models are only for deeply technical testers. The second part of the talk will focus on how each model is used to support the testing effort. This will begin by explaining how models can aid the test planning process and also provide a framework for risk-based testing. Models from real projects will then be used to explain how test cases (for each level of test) can be derived from the models using combinations of traditional test case design techniques. This is where we will stress our second learning point. It will be put to the audience that creating test cases from models is not the quantum-leap in approach that many testers believe it to be.

The final part of the talk will look at how model-based testing supports measurement collection and analysis, including test coverage, risk mitigation and defect distribution. Real-life examples will be presented to the audience to show how such quality indicators can be used to guide the testing effort and also provide the project manager with information to steer the project.

The talk will close with a questions and answers session.

### **Biography**

Matthew is the Test Strategist at **fmisolutions**, a company that provides training, consultancy and mentoring services that span the full software development lifecycle and focused on making software development teams successful through effective use of people, process and tools. He has been involved in all aspects of software testing, including the development of automated testing solutions and test process improvement initiatives. He has recently focused his attentions on model-based testing and testing within agile and iterative development lifecycles.



## Featured Speaker:

### Esther Derby, Esther Derby Associates, Inc Congruent Feedback – Feature Presentation

#### **Abstract**

I recently spoke with a colleague who was distressed that her office mate picked his teeth and wiped the bits on the table during meetings. "Have you told him his habit distresses you?" I asked. "No, I didn't want to hurt his feelings," she said. "I just avoid him as much as I can."

Even if you've never been in this exact situation, chances are you've been in some situation where a co-worker's habits made your working relationship difficult.

I'll outline the barriers to giving feedback, the costs of withholding feedback, and offer guidelines for giving feedback to build better working relationships.

#### **Biography**

Esther Derby is well known for her work in helping teams grow to new levels of productivity and coaching technical people who are making the transition to management. Esther started her professional career as a programmer and now focuses on interpersonal, group, and organizational dynamics.

Esther is co-author (with Johanna Rothman) of *Behind Closed Doors: Secrets of Great Management*. Her latest book is *Agile Retrospectives: Making Good Teams Great*, which she wrote with Diana Larsen. Esther is one of the founders of the Scrum Alliance and has an MA in Organizational Leadership.

Her articles have appeared in *Better Software*, *Software Development*, *CrossTalk* and on-line at [stickyminds.com](http://stickyminds.com), [scrumalliance.org](http://scrumalliance.org) and [ayeconference.com](http://ayeconference.com).



## GONZO QA II: FEAR AND LOATHING IN THE AFTERNOON

By Martin Cunnington

Not much time to eat lunch today. When I got down to the canteen, three at the foosball table were looking for a fourth and I hate to disappoint. Twenty minutes later my partner and I have lost the tournament two games to one, but by Golly, we made them sweat. I climb the stairs back to the fourth floor thinking about the test plan I have been commissioned to write this afternoon; well, start to write this afternoon at any rate. Half a day for a test plan is always a bit optimistic; three days is more like it. Half a day is only usually long enough for a checklist. I wonder what Richard is doing sat at my desk and remember that I moved a few days ago. Finally back at my new desk on the third, I find a note on my wrist rest with "Call me" scribbled on it, no name, no number, no clue. I ask my group who put it there but they look at me blankly. Someone suggests a member of finance rumoured to own an invisibility cloak, but I find this unlikely. He last left his office in 1998 and all the evidence suggests he hasn't left it since. I bin the note and then take it out of the regular bin and put it in the recycling bin. Hey, I have a conscience, you know.

I open up Windows Explorer and access the network drive where all the client project folders have been filed since time immemorial. Odd - the client I am looking for does not have a folder. Vaguely remembering something about this, I rummage around in my Outlook inbox and find an email from support saying that we have run out of space on [\clients](#), so all new files will be created on [\newclients](#) regardless of whether the client is new or not until future notice. Accessing the new network drive I find a project folder for my client and a sub-folder in it for the project I am going to work on. I open it up and find four further sub-folders: "final", "final 2", "final final" and "old". Note to self: recirculate the folder naming standards, especially those concerning manual version control. Thinking that I can at least ignore "old", I search the other three folders looking for the latest versions of the documents I need to write a test plan, namely the project scope, business requirements, functional specification, use cases, browser matrix and one or two other documents if the project warrants it. I find nothing of the sort but I do find a bookmark to the project home page on the new company wiki, Confluence. Accessing the wiki I find what I need attached to a page with a typo. I immediately correct the typo feeling pleased with myself. For a wiki to flourish, we all have to do our bit.

As I reread the project scope, my part in its creation comes back to me. I remember having to estimate how long I would require to write and execute the test plan for an essentially flat web site powered by Ektron, a content management system. I will also need to conduct one round of user training prior to hand-over. I am not sure that combining quality assurance and training works for every agency, but it certainly works for us. Unfortunately, the finished business requirements document at 100 pages is twice as long as I expected and the same goes for the 200 page functional specification. This translates into either more job satisfaction for me and my team or a great big time and money crunch coming right at me. I make a note to have a word with the project manager. I notice that the browser matrix was written around Easter 2006 and contains no commitment to test the site on either Firefox 2, Microsoft Internet Explorer 7 or Windows Vista. I think we can live without testing on Vista for another few months but Firefox 2 and IE 7 are here and now and usage is climbing. I make a note to ask the project manager to raise a change request. We will probably need to check the password reminder email is readable in Outlook 2007 too. Realising as I write it that this task is easy to describe, I add it to Jira, our new issue management system. We got it when we bought the new wiki software in some kind of two-for-one deal at Morrisons. Actually, I don't know how we got it, but Jira is a heck of a lot more powerful than UltraApps, our poor old issue manager – and there's the rub; it's also a lot more complex to operate. Still, it's early days and we have already had much success with it. I dispel the cloud of untapped Jira potential gathering over my head and read on, losing myself in the, I must say, rather well written project documentation. I make a note to congratulate the project Information Architect next time I see her; this doesn't seem like something I should put in Jira though.

I am a big fan of separating development, staging and live environments. I think developers should have the freedom to do whatever they want in the development environment, safe in the knowledge that they can do no harm to anyone except themselves and each other. The staging environment is where it all comes together and should be as close a copy of the live environment as possible. The live environment should be sacrosanct, heavily protected and fiercely guarded. Unfortunately, many content management system (CMS) implementations tend not to play by these rules. Not all clients

aspire to an academically-satisfying fully staffed author, editor, publisher model and all the roles end up delegated to a lady called Jo who works three days a week, who has too much to do and who does it straight onto live.

I am mulling over the ways we can prevent omnipotent CMS users from publishing stuff live just to see what it looks like. I'm thinking education, I'm thinking preview functions, I'm thinking thumb-screws, when I become aware of someone hovering just on the edge of my field of vision. That will be Mr. Call Me, then and I'm still thinking thumb-screws.

Call Me explains that he has a five or six (he's not sure) -page micro-site that really needs to go live this afternoon because the online media promotion starts tomorrow at 9 a.m. and it is too late to stop it. He asks me to take a quick look at the site, saying it is in English and Russian and each version shouldn't take me more than five minutes to approve. It occurs to me to ask him whether anyone has checked the online media banners. He says no and adds it to my verbal brief. After a very short, very intense discussion it turns out that the project has no scope, no budget, no job code and isn't scheduled via the resourcing system. It also turns out that despite this, Call Me has somehow got it built and promised the client we would deliver it last Friday so it is in fact all on staging and late. This is wrong on so many levels that it is difficult to know where to begin. However, needs must when the devil drives, so I park the CMS test plan task and pick up this one instead. I make a note to talk to Call Me about his project management skills during the evaluation phase of this project (should there be one - ha!) and prepare for a bout of what I call exploratory testing when the muse is with me and ad hoc testing should she be otherwise engaged.

I start by visiting the home page of the English site on the staging server using MS-IE 6. What joy! I am looking at a competition site which means there will be a form on it somewhere and a database back-end that needs checking too. While I manually browse the site, I run a bunch of automated tools over it in the background including XENU link-checker, CSE HTML Validator and Watchfire WebQA (R.I.P.). Cheap as chips XENU finishes first, ah bless, and the report is not only red but much longer than you would expect for a five or six page site. The HTML validator spits out its usual super-wordy report and a quick glance tells me there's a lot of red in there as well. As the mighty Watchfire weighs in with its final, damning verdict, I reach for the phone and make two calls. I call Call Me to postpone tomorrow's online media promotion because this won't be going live tonight and I call home to say I will be late.

Next episode: Fear and loathing after dark.

### **About the author**



Martin Cunnington is Head of Quality Assurance at MRM Worldwide, a leading digital marketing agency servicing some of the world's bluest of blue chip companies. Martin joined MRM Worldwide (then Zentropy Partners) in 2000 from HP (then Compaq) after 10 years Marketing IT service in Munich (then München), Germany. A recently Chartered IT Professional, his influences include Grace Hopper, René Magritte, Gary Numan and Hunter S Thompson.

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*June 2007 Issue*

**NEXT CONFERENCE**

**Wednesday  
13 June 2007**

**Testing – a Risky  
Business**

- Risk Management – A Testers View
- Testing Software for Accessibility
- Testing Hats
- Test Patterns
- The Six Hats of Software Testing
- Top Ten Tips to Improve Your Testing Process
- Overwhelm them With Estimates

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Please note that any views expressed in this Newsletter are not necessarily those of the BCS.

## FROM THE EDITOR

It's AGM time again and this will take place during the morning of the conference on 13 June.

There are two important roles to fill, those of Programme Secretary and Secretary as Lloyd Roden and Julie Gardiner are both standing down from the respective roles. We are grateful to both for the time they have given whilst serving on the SIGiST committee.

You will find included here a reminder of the election process, so we hope that you will consider taking an active part in ensuring that the SIGiST continues to thrive in the future. The roles are voluntary, of course.

We have had a nomination of Mike Hendry for the role of Secretary. Mike is a regular attendee of SIGiST conferences and has an excellent background in testing. He has produced his manifesto which is included in this newsletter.

If you would like to discuss what is involved in either role then please contact either our Chairman Stuart Reid at [s.c.reid@cranfield.ac.uk](mailto:s.c.reid@cranfield.ac.uk) or our Vice-Chair [geoff.thompson@experimentus.com](mailto:geoff.thompson@experimentus.com)

We look forward to welcoming new members to the committee - it is a good opportunity to bring new ideas to the table.

Pam Frederiksen  
Communications Secretary  
Tel: 01483 881188 (Leysen Associates)  
Fax: 01483 881189  
Email: [pam@leysen.com](mailto:pam@leysen.com)

**BCS SIGIST website:** [www.SIGiST.org.uk](http://www.SIGiST.org.uk)

**SIGIST Standards Working Party:** [www.testingstandards.co.uk](http://www.testingstandards.co.uk)

**SIGIST UML Testers Forum:** [www.umltesters.org](http://www.umltesters.org)

### Future SIGiST conference dates

**19 September 2007**

**13 December 2007**

## BOOKING INSTRUCTIONS

1. Download a booking form from:  
<http://www.SIGiST.org.uk/bookingForm.pdf>

**FAX TO:**

Phil Dyson  
01793 417444

**OR POST TO:**

Phil Dyson  
Specialist Groups Officer  
First Floor, Block D  
North Star House  
North Star Avenue  
Swindon  
SN2 1FA

## NEXT MEETING – PROGRAMME

<b>BCS SIGIST – Testing – a Risky Business?</b> Wednesday 13 June 2007 Royal College of Obstetricians and Gynaecologists 27 Sussex Place, Regent's Park, London NW1			
08:30	Coffee & Registration, Exhibition opens		
09:15	<b>Introduction and Welcome</b> <i>Stuart Reid, SIGIST Chairman</i>		
09:20	<b>Featured Speaker</b> <b>Risk Management – A Tester's View</b> <i>Tim Lister, Atlantic Systems Guild, Inc.</i>		
10:20	AGM		
10:30	SIGIST Best Presentation Award		
10:35	Networking session and commercial break		
10:50	Coffee & opportunity to visit the exhibition		
11:20	<b>Testing Software for Accessibility</b> <i>Sally Cain</i> <i>Royal National Institute of the Blind</i>	<b>Featured Speaker</b> <b>Workshop:</b> <b>Workshop: Test Patterns</b> <i>Tim Lister, Atlantic Systems Guild, Inc.</i>	<b>Workshop:</b> <b>The 6 hats of Software Testing</b> <i>Julian Harty,</i> <i>Google</i>
12:05	<b>Testing Hats</b> <i>Andrew Goslin,</i> <i>Marks and Spencer Plc</i>		
12:50	Lunch & opportunity to visit the exhibition		
14:00	<b>ISEB/ISTQB Advanced Level explained</b> <i>Brian Hambling &amp; Geoff Thompson</i> <i>UK National Executive</i>	<b>Workshop:</b> <b>Accessibility Testing</b> <i>Sally Cain,</i> <i>Royal National Institute of the Blind</i>	<b>Workshop:</b> <b>The 6 hats of Software Testing</b> <b>(continued)</b> <i>Julian Harty,</i> <i>Google</i>
14:30	<b>Top ten tips to improve your testing process</b> <i>Declan Kavanagh</i> <i>Insight Testing Services</i>		
15:15	Tea & opportunity to visit the exhibition		
15:45	<b>Tips for Testers</b> <i>Peter Morgan, Nicemove Ltd</i>		
16:00	<b>Featured Speaker</b> <b>Overwhelm Them With Estimates</b> <i>Tim Lister, Atlantic Systems Guild, Inc.</i>		
17:00	Closing Remarks		

The SiGiST committee reserves the right to amend the programme if circumstances deem it necessary. Workshops will have limited places, to avoid disappointment try to book in advance.

## SIGIST ELECTION PROCESS

Elections will normally take place at the SIGiST Annual General Meeting (AGM) in June. In extraordinary circumstances (e.g. early resignation) the SIGiST committee has the power to invite someone to take on any of the vacant roles until either the AGM or an Extraordinary Meeting when the role will be filled using the election process described here.

Elections are required in 2 sets of circumstances:-

1. Automatically after a SIGiST Committee member(s) has held a position for 3 years.
2. If a SIGiST committee member resigns before the completion of their 3 year tenure.

The basic process to be adopted for any election follows:-

<b>Task</b>	<b>Timescales</b>
When an election is to take place at an AGM the available positions (including a short job specification – 3 lines max.) should be announced prominently within 'The Tester' (normally in the edition advertising the AGM). Otherwise, for an Extraordinary Meeting, an email will be sent to all registered email addresses on the SIGiST database announcing the election(s).	Maximum 8 weeks prior to election.
Candidates must register their interest in standing for one of the positions with the SIGiST Secretary and provide an accompanying short manifesto (no more than a page of A4) describing what they expect to bring to the role. Anyone who has attended a SIGiST event in the previous 12 months may stand for any position (each application must be seconded by one other person who has attended a SIGiST event in the previous 12 months).	At least 4 weeks prior to the election (after this point no more applications will be accepted).
A list of applicants for each job is released to the whole SIGiST database via email together with their manifestoes.	3 to 4 weeks prior to election.
Eligible voters (anyone who has attended a SIGiST event in the previous 12 months) who cannot attend the meeting send in their proxy votes to the SIGiST Secretary.	At least one week prior to the AGM or Extraordinary Meeting.
Election takes place during AGM or Extraordinary meeting.	At the AGM or Extraordinary Meeting.

<b>Rules</b>
1. Each candidate may stand for as many positions as they want (and can vote for every position available), but may only hold one position. In the event that someone is elected to more than one role then they must immediately decide which one role they wish to take up and vacate the other positions. The second-placed candidates for the vacated positions are then elected to those roles.
2. All those that have attended a SIGiST event in the previous 12 months may be a candidate for any position.
3. Each candidate must create a short manifesto describing why they feel they are the right

person for the role and send it to the Secretary of the SIGiST when they register their interest in standing for that role.
4. A simple majority is required to be elected to a position.
5. Anyone who has attended a SIGiST event in the previous 12 months is eligible to vote.
6. Votes are allowed via email if someone eligible to vote cannot attend the AGM or Extraordinary meeting. Such proxy votes must be received by the Secretary of the SIGiST at least one week prior to the meeting.
7. The formal voting process will take place on the day of the meeting (a simple show of hands) plus any received proxy votes.

# NOMINATIONS

## Secretary role

### Nomination – MIKE HENDRY

#### Mike's manifesto:

I have a number of reasons for wishing to become the Secretary for the BCS Specialist Group in Software Testing.

- I am passionate about testing and believe in testing as a professional discipline.
- I have a desire to improve testing and the service that it provides to all of its customers.
- I want to be more involved in the profession and start giving something back to the profession.
- I am an avid supporter of the BCS and SIGiST in particular and wish to help it fulfil its objectives.
- I want to continue to learn and develop in this discipline.
- I have been successful in promoting the importance of testing in all of the organisations that I have worked for and would continue to do this on a wider scale if a member of the committee.

What would I bring to the role? Well apart from my passion and desire I will bring the following:

- 15 years experience in IT of which 12 have been in testing and the other 3 in management either of development teams or projects.
- I have worked as a contractor and as a permanent employee, as a hands on tester, test manager and more recently as a senior manager heading up testing departments.
- I have always worked for commercial organisations and would provide a balance on the committee that is predominantly made up by people in consultancy, training or academia.
- I have a personal assistant who would help me fulfil my role at no cost to the BCS.

## Programme Secretary role

### Nomination – STEVE ALLOTT

#### Steve's manifesto:

I am a chartered information technology professional, specialising in software testing and quality assurance, with 25 years experience of major software development and testing projects at both UK and US financial institutions. I am currently working as an independent software testing specialist for a number of organisations in the banking, insurance and travel sectors. As executive director for IT Integrity International, a not for profit organisation, I'm helping to direct research in IT Security, Workforce Education, IT Governance and the software testing body of knowledge.

I was treasurer and then programme secretary for the SIGiST between 1996 and 1999 and helped design the group's first web site. I developed the technical programme and chaired the EuroSTAR conferences in 2000 (Copenhagen) and 2001 (Stockholm).

If elected as programme secretary for the SIGiST, I would try to build on the successful format developed to date, only introducing new speakers and ideas depending on the requirements of the membership. There are good stories to be heard throughout the UK and Europe and I have many connections through involvement in the European SIGs and conferences over the years so can promise a very varied and exciting programme in the years to come. Of course you need good processes and technology support in a typical software testing project, however my personal interests are firmly focused on helping the people involved in software testing to succeed within their own chosen discipline and organisation.

## ANNOUNCEMENTS

### **SIGIST Library**

Looking for a testing book but not sure which topics are covered? Or are you trying to decide which testing book to buy? Or do you simply want to increase your testing knowledge? If the answer to any of these questions is 'yes' then the SIGIST Library could help!

The SIGIST Library has lots of testing books covering a variety of topics and they are available to borrow for a period of 4 weeks - free of charge. Extended loans are allowed as long as the book has not been requested by another SIGIST member.

Topics include (amongst others) Requirements testing, Reviews/Inspections, Test Management, Techniques, Test Process Improvement

If you would like to know more about the library and books available, or for any queries, please contact Julie Gardiner on 07974 141436 or email her at [gardinerjulie@yahoo.co.uk](mailto:gardinerjulie@yahoo.co.uk). Alternatively, download the book loan form on the SIGIST website [www.SIGiST.org.uk](http://www.SIGiST.org.uk). Happy Reading!

### **Please Complete our Survey**

A request from Mike Holcombe, Chair in Computer Science in the Department of Computer Science, Sheffield University.

Our research, which aims to investigate the relationship between the level of professional skills and testing ability, is based on a questionnaire in which you will be asked to select the tests that are necessary when Category Partition and Branch Coverage are used. I would appreciate it if you complete this questionnaire as it is very important for our research.

You will find the questionnaire at:

<http://www.surveymonkey.com/s.asp?u=491633500982>

## **SPECIALIST GROUP FOR CHANGE, CONFIGURATION AND RELEASE MANAGEMENT**

The 3rd Conference of the Specialist Group for Change, Configuration and Release Management of the British Computer Society (BCS CMSG) will be held 15 & 16 May, 2007, at the Oxford Belfry Hotel, Thame, Oxford.

This year our programme focuses on life-cycle management across the supply chain, and the vital role of configuration and change management in that process. Enforcing mandatory process steps, meeting auditing and compliance goals, ensuring proper approvals, communicating and managing change globally across distributed teams and supply chains - these are some of the biggest challenges that organisations face as they seek to deliver higher levels of quality for their services, systems and products. This includes requirements for implementing ITIL (BS15000/ISO20000) and CMMI.

There are presentations and workshops by practitioners and world leaders in the field, such as our keynote speaker Sharon Taylor, ITIL Refresh Chief Architect and Chief Examiner for ITIL v3. We also have excellent networking opportunities and a range of industry sponsors at the accompanying exhibition, making this is a great chance to find out the latest in this field.

For more information, including programme/timetable and registration options, please see:

[www.bcs-cmsg.org.uk/conference/2007/index.shtml](http://www.bcs-cmsg.org.uk/conference/2007/index.shtml)

### **The Financial Services Testing Group (FSTG) cordially invite you to attend the JWG-IT seminar**

## **Tested and Ready for MiFID**

to be held between 5.00-6.30pm on Thursday 10 May 2007 at 60 Cannon Street, London, EC4N 5BN

"It is critical that firms get their testing strategies and plans together early as the longer they wait, the more costly it will be downstream. Research suggests that the cost of MiFID IT implementation, in the UK alone, is set to surpass £1 billion, with typical UK investment banks spending upwards of £10 million," **PJ Di Giammarino, Founder and CEO of JWG-IT.**

MiFID will be enforced from 1 November 2007. Join other senior decision makers responsible for the implementation of MiFID and hear how your business can test its MiFID-readiness more effectively and with less risk now. Hear the collective insights of industry experts including **Intel, Oracle, JWG-IT and the Financial Services Testing Group.** Discuss your MiFID issues during the drinks and networking session to be held directly after the event.

During this seminar learn about:

- the implications of the MiFID legislation and its impact on IT infrastructure
- how technology leaders are collaborating in the development of IT reference architecture to support MiFID implementation, and
- how the FSTG member organisations are delivering the testing solutions.

Even though industry debate continues, it's now time to prepare for the implementation. We believe you will find this seminar vital. Whether you are a COO, CIO, Compliance Officer, Programme Manager or Test Manager, MiFID will have a big impact on your working life. **So this is an event you should not miss.**

**Places are limited! Register now** <<http://www.jwg-it.eu/fstg>> **or email us at:** [fstg@jwg-it.eu](mailto:fstg@jwg-it.eu)

## **WE ALL HAVE A STORY TO TELL, AND I NEED TO HEAR YOURS**

If you have worked on a software project for more than 3 months, or have worked on more than one project, then you probably have a story to tell. In case it has escaped your notice, experience is one of the best teachers available. Whereas personal experience is a good tutor, we can all learn from the path others have taken. That's the reason to appeal for your story.

"Hold on", I hear you saying, "surely there are lots of people out there who can create a good PowerPoint presentation, and/or have written books on Testing". That is true, but you are a unique individual, and there is no-one who has trodden the same path. There are lots of really good talks at conferences, and articles on software testing on the web, but we all need to hear from coal-face workers, who have a story to tell, and a passion with which to tell it.

I call some of those who write and speak about testing 'the professionals'; they are regulars on the speaking circuit, and often work for a test consultancy, or for a training provider. These people have got significant things to say to us all, and we can all benefit enormously from their input. My debt of gratitude extends not just to those from the "Testing Hall of Fame", but to the people who have taken time to teach me from their experience over a lunch-time walk, or a chat around the coffee machine.

Along the testing career path, some of what I have done has worked well, and some things have been dreadful. If I have had a disaster, it has been painful. I would rather that the painful lessons are shared, to help others avoid the same pitfalls, and learn from my experience. My pain is lessened by your gain!

There are several things you can communicate in a presentation at SIGiST, or article in 'The Tester'. Although not always at the same time, I am looking to be:

1. Inspired
2. Encouraged
3. Provoked
4. Warned
5. Taught

I still remember a testing friend remarking how he deals with totally missing requirements: he writes what he sees as requirements, and plays them back to the business. Sometimes, he will deliberately indicate that a list is displayed on screen in post-code order, when this is totally inappropriate. The reaction he is looking for is to get the business to say that this is wrong, and indicate what the correct order should be. This from business representatives who previously had no time to define requirements!

I hope that this example indicates that a little snippet can have a massive personal impact on friends and colleagues in the larger testing community. Your story may be about how to turn the theory that you have heard into practice, to make a real difference. Some of 'the professionals' began their path to being a regular presenter by sharing their small story, and for them, the rest is history. I need to hear your story. For you, it might just be the beginning!

Peter Morgan

Peter Morgan is a freelance tester. He can be contacted by e-mail at [morganp@supanet.com](mailto:morganp@supanet.com), and would be honoured to help you clarify your thoughts for wider distribution. However, he is no PowerPoint expert!

If you would like to present a paper at the SIGiST (for 20 or 40 minutes) please contact:

Pam Frederiksen      [pam@leysen.com](mailto:pam@leysen.com)

## ABSTRACTS AND BIOGRAPHIES

### Featured Speaker:

**Tim Lister, Atlantic Systems Guild Inc.**

***Featured Presentation: Risk Management – A Tester’s View***

All software projects are full of risk. It comes with value of the project, and is unavoidable. In this session Tim will discuss his view of software risk management, and then will focus the group on a discussion of the most common testing risks and what contingency and mitigation is possible.

***Featured Presentation: Overwhelm Them With Estimates***

We live in a world of finite funding and resources, and reasonable estimation can keep projects out of troubled waters. Most organizations are not very good at estimating, and as such, allow expectations to get a bit out of hand. Tim Lister will discuss an estimating strategy to help everyone stay realistic.

***Workshop: Test Patterns***

Six Guild members have been working on a book to come out later this year on Project Management Patterns. Tim Lister will describe some of the patterns that relate to testing, and will get the group to divide up to find patterns of their own.

***Tim Lister***

Tim Lister is a principal of the Atlantic Systems Guild, Inc., based in the New York office. He divides his time between consulting, teaching, and writing. Currently he is working on tailoring software development processes using software risk management techniques. He has been an invited speaker at the Agile Development Conference for each of the last three years. Tim was a guest lecturer on software risk management at the Stanford University School of Business, and gave the Dean’s Lecture at the Rochester Institute of Technology. He was a member of the Airlie Software Council, a group of industry consultants, advising the DoD on best practices for software development and acquisition, and is a member of the Cutter Business Technology Council.

Tim is co-author with Tom DeMarco of the text, *Waltzing With Bears: Managing Software Project Risk*, (Dorset House, 2003), which won the Jolt Award for best general computing text in 2003-2004. Tim and Tom are also co-authors of *Peopleware: Productive Projects and Teams*, 2nd ed. (Dorset House, 1999). *Peopleware* has been translated into ten languages. Tim Lister and Tom DeMarco are also co-editors of *Software State-of -the-Art: Selected Papers*, a collection of 31 of the best papers on software published in the 1980’s (Dorset House, 1990). The two partners have also produced a video entitled *Productive Teams*, also available through Dorset House.

Tim Lister has over 30 years of professional software development experience. Before the formation of the Atlantic Systems Guild, he worked at Yourdon Inc. from 1975 to 1983. At Yourdon he was an Executive Vice President and Fellow, in charge of all instructor/consultants, the technical content of all courses, and the quality of all consultations.

Tim Lister lives in Manhattan. He holds an A.B. from Brown University, and is a member of the I.E.E.E. and the A.C.M. He also serves as a panelist for the American Arbitration Association, arbitrating disputes involving software and software services, and has served as an expert witness in litigation proceedings involving software problems.



## **Sally Cain, Royal National Institute for the Blind**

### **Presentation: Testing Software for Accessibility**

"Accessibility - isn't that a legal requirement for websites?"

"I've heard colleagues talking about it, but surely usability is more important than accessibility?"

"I don't think disabled people are going to use this software, anyway."

In fact, lots of disabled people use computers, even people whom you might at first assume could not possibly use one. And unless you're testing systems for pilots or surgeons, people with physical and sensory impairments will need to be able to use your software effectively.

This presentation will give you an insight into the relationship between accessibility and usability for disabled people. We will review the different accessibility standards, and see some real world accessibility testing. You will also have the chance to experience access technology in action, and then you can start doing your own testing in a follow-up workshop.

### **Workshop: Accessibility Testing Workshop**

Here's your chance to get some hands-on experience of testing software for accessibility. This workshop will get you started on basic testing, and send you on your way with plenty of guidance about how to find out more. In this workshop you'll see what the main barriers are for someone with a disability trying to use software applications. Then, with nothing more than a laptop running Windows, you can have a go at accessibility testing for real. We'll use some of the rudimentary tools that are built into MS Windows to test the MS Address Book, and find some of the accessibility flaws in Microsoft's programming.

No prior knowledge or experience required. Bring a laptop with MS Windows.

### **Sally Cain**

Sally Cain has been with the Royal National Institute of the Blind (RNIB) since 1999, working in the area of technology and sight loss.

Initially Sally wrote and compiled resources around technology and sight loss, and was the creator of the Technology area of the RNIB website. For several years, she organised the management of Techshare, RNIB's international technology conference. In more recent times, Sally has been working in the area of software accessibility, undertaking testing and working with developers to improve the accessibility of their products. This has included projects for the procurement of internal systems within RNIB, and also external consultancy.

Sally's publications include an RNIB booklet 'See to IT at work: a practical handbook for employers' and the RNIB book 'Accessing Technology: using technology to support the learning and employment opportunities for visually impaired users'. As well as having written many articles in the specialist press, Sally is also the Editor for the monthly technology column in the popular RNIB magazine 'NB'.

## Julian Harty, Google

### Workshop: Six hats of software testing

Software still has bugs, lots of them, and even though software testing is now recognized as one way to help identify bugs, the testing is seldom satisfactory for anyone involved in the process. This interactive workshop provides fresh ideas and techniques to help improve the effectiveness and efficiency of software testing by combining some of the best ideas from both inside and outside the testing industry.



The six hats are:

- Green: Explore, be creative in searching for bugs
- Yellow: Risk-based testing, be positive, what's the risk of releasing the software NOW. If the risks are too great, focus the testing on finding and mitigating risks.
- Blue Management overview with a QA focus, software development as a 'factory routine'
- Black Cautious, judgemental. The quality school: process oriented, policing the developers
- White Analytical, scientific, e.g. white-box testing
- Red Passionate, committed: Putting testing first e.g. Test-driven development (TDD) and test-first development (TFD) where development doesn't start until tests have been written

The material includes examples from within Google and from elsewhere in the industry.

Notes: the concept of 'six thinking hats for testing software' draws on:

- Material and ideas from Edward de Bono, who coined the idea of 'lateral thinking' and 'six thinking hats' used throughout the business world.
- Work by Bret Pettichord on the four schools of software testing
- Discussions, ideas, and debates with some of the leaders and visionaries in software testing.

## **Andrew Goslin, Marks and Spencer**

### **Presentation: Testing Hats**

Even although software testing is now recognised as one way to help identify faults, testing is seldom satisfactory for anyone involved in the process. Yet, we are told that test teams will be faced with ever greater challenges: new technologies; increasing complexity and integration; tougher deadlines, with ever shorter concept to market cycles. How will we as test professionals cope?

Are you comfortable in your role? If so, that's great! But are you complacent, too? Are you aware of the constant changes around you? Changes in your office? Changes in the testing and IT industry? Are you ready for change?



How can we become more effective? How can we maximise the potential of our teams? What motivates us and our teams? Why are some people so passionate about testing? How can we inspire and motivate others?

This inspirational talk draws on ideas from within the testing industry and outside it. There are many facets to testing. We will look at how easily we condition ourselves mentally and challenges which we might face in trying to introduce ourselves and others to new ideas. This presentation will explore ideas from Edward de Bono's "Six Thinking Hats", from Spencer Johnson's "Who moved my cheese?" and from visionaries within the testing industry. Ideas that will be presented are drawn from personal experiences, from various branches of psychology and organisational psychology, theories about learning and learning styles, and include a variety of analogies.

Come and gain fresh perspectives on testing and on your view of yourself. You will be challenged and inspired. You can make a difference. You can choose to make a difference. Let your passion inspire you.

If you take away just one seed of an idea from this talk and you nurture it and let it grow, indeed flourish, then your participation will have been worth it.

### **Andrew Goslin**

Andrew Goslin is a programme test manager at Marks & Spencer. The role encompasses testing on key programmes. He has also been responsible for test strategy, methods and standards; ensuring that test practices are integrated with project delivery processes and exploiting test tools to meet current and future business objectives. He has over 15 years IT experience in various roles and has worked in Retail and Financial Services industries. He holds a BSc in Computer Science, is a certified ISEB Test Practitioner and is a trained CMMi Assessor. He is active in promoting professional testing, speaking regularly at conferences, working with ISEB and the TMMi Foundation.

**Declan Kavanagh, Managing Director, Insight Test Services**

**Presentation: Top ten tips to improve your testing process**

Based on assessing and supporting improvements in the test processes of many organizations, Insight has compiled a 'top 10' of recommendations that are frequently identified as 'quick wins'. These are practical suggestions that are typically low cost but high benefit in terms of solving problems with the testing process and helping to achieve improvement goals such as improved test effectiveness, reduced test execution time, etc.. Many of these principles and approaches are embedded in industry standards/models such as TPI and TMM(i) but this presentation will provide a practical view on their use with examples.



**Declan Kavanagh**

Declan has 28 years experience in IT , he held hardware test engineering, test/quality management positions up to CEO level in US multinationals and SME's. He has set up Software Development and Software Test business units providing services across Europe and the USA. He founded Insight Test Services in 2003.

## ARTICLES

### Integrated Testing

**By Sarah Saltzman, ADM Solutions Manager, Compuware**

It's over 50 years since the first applications were developed, yet the problem of software quality still continues to plague the industry. Week in week out we continue to hear stories of applications failing or new software being ridden with bugs. It's not simply just an IT problem any more; software failure has resulted in millions of pounds being wiped off the balance sheets of major organisations across the globe. The National Institute for Standards and Technology has stated that the cost of poor software quality to the US economy alone is £40billion annually.

Although the impact of poor software quality continues to leave business leaders up in arms, it's a problem that has not been addressed at its core, with testing still perceived as a discrete function – undertaken as a separate phase after code has been developed. At one time, IT had the luxury of focusing on building the best applications possible, often without severe time-frame limitations. However, budget constraints and highly competitive markets have resulted in increasing pressure to develop and deliver applications as quickly and cost-effectively as possible, leaving little margin for error. The same factors that make extending testing time impossible also mean the business cannot afford to implement unreliable or untested applications. A compromise must be found that helps businesses ensure the quality of their applications without extending timelines.

What needs to happen is that quality needs to be inherent throughout the entire application development process, so that it is considered and prioritised by the development team from the initial specification onwards. In traditional development models, application testing is a distinct phase that does not start until after development is completed. Changing this approach to adopt application testing as soon as development starts results in continuous test cycles that enable developers to isolate application problems as they are introduced and take corrective action immediately, rather than passing them over the wall to testing, where it may take several cycles to detect the error. By employing a method of Continuous Integrated Testing (CIT), developers can check the quality of their code as it is being developed. Far from increasing the time taken to deliver new applications, this can actually reduce the time needed for systems-testing after development has been completed. Identifying issues with specific sections of code as soon as they arise means they can be addressed straight away.

By testing code as it is written, developers can ensure the code they pass to the quality assurance team is of a certain standard. This has not previously been a big priority for developers as they have traditionally been rewarded only for delivering the right quantity of code on time and on (or under) budget. Organisations need to ask themselves whether rewarding developers based on quantity rather than quality is really the right approach. Surely, the software quality conundrum could be addressed in part if developers were rewarded or assessed based on the quality of the code they produce.

Recognising the importance of providing code that has been tested for a basic level of functionality and quality requires a cultural shift, most notably for developers, but also for testers and business managers who must encourage development teams to make the change. Developers and testers have traditionally had little in common, sitting on two very different sides of the fence, and so development teams have had little empathy with the role of the tester. As such, one approach to encouraging this cultural shift is to get the two to work more closely together by placing testers in the development team to help them run continuous testing cycles throughout the development process. By taking this approach developers will benefit from the wealth of knowledge and experience testers have; likewise testers will understand the many challenges faced by software developers.

As with any cultural change though, much of the impetus must come from the top, otherwise software quality will continue to be a problem for the next 50 years. Developers and testers need to see that quality, not just cost, is a big priority for the company. Business managers can demonstrate this by introducing rewards for the quality of code, not just delivering code on time. In addition, managers cannot expect developers and testers to automatically embrace the change, and understand the role of the other. Few testers or developers have any great knowledge of the way the other works, and most developers will have attended courses that barely touched on the subject of testing. As such, managers must recognise the need for education – giving developers and testers an insight into the

role and working practices of the other. Finally, managers must make sure staff are provided with the relevant tools to objectively assess the quality of an application.

Another important change needed to encourage developers to prioritise quality is the introduction of quality gates, or some kind of service level agreement (SLA). A quality gate is a process through which a deliverable must pass before it is accepted by developers as ready for systems testing. Developers need to assess the code they are delivering against quality targets to see if it can pass through the quality gate. If it does not meet the quality targets then the developer needs to take it back for further work, otherwise it can be passed on for systems testing. By implementing this kind of system, businesses are putting in place a formalised process for ensuring the quality of applications, and giving developers the message that they must deliver code written and tested to a basic, pre-agreed standard.

Essentially we are talking about a continuous approach to quality; rather than quality being an afterthought it needs to be a forethought. Quality needs to be written into requirements, and development teams must be given the tools, skills or resources to ensure that testing is integrated into what they do. This isn't something that can happen overnight, but with sponsorship and commitment from the top of the organisation, and changes to the way developers are rewarded, businesses should be able to finally get a handle on the software quality problem.

## Gonzo QA III: Fear and loathing after dark

By Martin Cunnington

During the day stuff happens and I deal with it, but when the sun goes down and the shadows lengthen, doubt sets in. Andy Grove said only the paranoid survive. What did he mean by that? Should I read his book? What if I don't?<sup>i</sup> Certainly it always worries me to have nothing to worry about. What have I overlooked? What disaster should I be preparing for rather than complacently sitting here watching a Norwegian ski down the up escalators at Angel on YouTube<sup>ii</sup>? Getting fired, obviously. As Head of QA, it isn't enough for my group to be more or less fully utilised testing stuff for the next quarter. I must plan for what needs to happen next! I need to lead from the front and do some real work! I need to check it's all happening according to plan and take corrective action accordingly! I got that from Deming and he got it from Shewhart and they both seemed to know what they were talking about, so it's good enough for me<sup>iii</sup>.

The economist in my head tells me that I'll get fired and my department will close for ever if I over-price my services (i.e. don't add enough value to justify the cost) or sell services that nobody wants to buy at any price. One defence against the dark might be to develop an extended marketing mix for quality assurance, so with props to Philip Kotler et al, let's have a go at that<sup>iv</sup>.

Product. Mine is a service department offering pre-sales input into new business pitches, post-sales pre-production services such as testing CD-ROMs before duplication and post-sales post-production services such as monthly web site audits. When MRM was very young, the specification of these services used to fluctuate wildly as we fought to define and agree what we did. Things have calmed down in the past few years, thanks to the continued existence of a company engagement methodology and our gradual take up of external best practice such as PRINCE2, the W3C web accessibility initiative, ISEB software testing certification and various ISO, IEEE and BS standards in what can best be described as a great big MRM mashup. The QA Department at MRM is pragmatic and not only includes quality assurance and testing services but content management system training and bulk-email systems management too. I guess you have to be there.

Price. The price of QA services is basically the number of hours I quote in the project scope multiplied by the charge-out rate. Since the charge-out rate is fixed on an annual basis at the company level, I can vary the price only by varying the hours. I have learned that if I under-estimate in the paid-for, pre-production development and testing phases, we end up incurring a whole lot of unpaid-for costs in the post-production support phase, fixing issues I really should have found and had fixed earlier; total cost of ownership works both ways, you know. The price of my services to MRM is my salary multiplied by a constant which varies little from year to year. It is therefore quite easy to work out whether or not MRM is making any money on me and my staff (and it had better be); agency life is transparent that way. The value of what I offer is not easy to quantify. However, I have not met a member of staff who does not want to deliver quality, nor a client who does not want to receive it (who is still a client) and my group has an excellent reputation for finding defects. There is no future in not doing it properly as long as we can agree on what properly is, how long it takes and how much it costs.

Place. Although MRM QA staff are available for face-to-face consultation in the office or at the client site, most work takes the form of written deliverables such as test plans or defect reports. This tends to push QA services into the shadows, so to remain in the light, constant promotion is a necessity.

Promotion. I constantly work to inform my colleagues what my group does both face-to-face, for example during new hire inductions, and via company-wide email announcements. I then need to persuade them to use the services on offer, usually via informal case studies with a strong bottom line, i.e. what \*we\* can do for \*you\*. Front-line staff enjoy having a group behind them making sure that what they have to deliver is up to the mark. I sustain interest via company-wide email updates. To maintain visibility, I also take an active interest in wider issues not necessarily related to quality assurance per se, e.g. intellectual property ownership and international data protection law. Although clients like the reassurance of an MRM QA facility, it does not win pitches. Promotion to clients is therefore achieved indirectly via our front-line staff. I could do more of this. I have discovered that I can promote what I like, e.g. automatic regression testing and accessible Flash sites, but my customers continue to demand more mundane things like Flash banners that click-through to the right target page and bulk-email sends that go to the right distribution list. I think I need to continue to offer both.

People. MRM is a service-organisation and what is a service organisation without people? Just a few desks, computers and discarded Yo! To Go sushi boxes<sup>v</sup>. MRM QA staff and documents come into contact with customers from time to time. This touch point is tangible. Company deliverables that have been subject to QA processes come into contact with customers every day. This touch point is intangible only until something goes wrong and someone asks "hasn't this been QA'd?"

Process. Ah yes, my favourite. In my ideal world, my group is responsible only for verifying that everyone-else in the production cycle has defined their processes and is following them. Thus all groups successfully test their own deliverables and my group simply verify that it is so before retiring gracefully to the pub for the rest of the afternoon, or perhaps tending our allotments, or share portfolios, it doesn't matter which. I have some way to go in this area.

Physical evidence. The Wikipedia says this so well there is nothing I can add: "Unlike a product, a service cannot be experienced before it is delivered, which makes it intangible. This, therefore, means that potential customers could perceive greater risk when deciding whether or not to use a service. To reduce the feeling of risk, thus improving the chance for success, it is vital to offer potential customers the chance to see what a service would be like. This is done by providing physical evidence, such as case studies, or testimonials."<sup>vi</sup> I have some way to go in this area.

It always worries me to have nothing to worry about. Looks like I have plenty to keep me up at night. I'll just watch a few minutes of cheese on Cheddarvision<sup>vii</sup> and then it's time for bed.

Next episode: I've learned so much from my mistakes, I'm thinking of making a few more.

### **About the author**



Martin Cunnington is Head of Quality Assurance at MRM Worldwide, a leading digital marketing agency servicing some of the world's bluest of blue chip companies. Martin joined MRM Worldwide (then Zentropy Partners) in 2000 from HP (then Compaq) after 10 years Marketing IT service in Munich (then München), Germany. A recently Chartered IT Professional, his influences include Grace Hopper, René Magritte, Gary Numan and Hunter S Thompson.

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Issue  
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**September 2007**

**NEXT CONFERENCE**

**Tuesday**  
**18 September 2007**

**Joined-Up Testing**

- Extreme Testing: A Software Tester's Lessons Learned from Extreme Programmers
- Implementing a Test Automation Centre
- Lessons Learnt Implementing DDP
- Web Testing under the bonnet
- Adapting to Agile
- Testing: It's in the Game
- Joined up testing: A Rightshore™ case study
- Test Automation: The Next Generation?

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Please note that any views expressed in this Newsletter are not necessarily those of the BCS.

## FROM THE EDITOR

We're pleased to welcome Steve Allott and Mike Hendry to the committee following the AGM at the June Conference.

Steve has taken over the role of Programme Secretary, having already undertaken this role a few years ago – so a glutton for punishment! However, I'm sure you will make the job a lot easier for him by volunteering to present a paper at a future conference. If so, do contact him at [stephen@electromind.com](mailto:stephen@electromind.com)

Mike is now Secretary and we look forward to an input of new ideas for forthcoming events.

The Library is now being looked after by Sue Atkins (many thanks for volunteering!) and Sue can be contacted at [SigLib@iotest.com](mailto:SigLib@iotest.com)

Don't forget that the EuroSTAR Conference will take place in Stockholm this year at the beginning of December. Peter Morgan is going and he wants to persuade you to go too – see later in this newsletter. However, this still leaves time for you to attend the December SIGiST one as well!

In the mean-time, please make sure you are booked in early for the SIGiST conference on Tuesday 18 September, especially for any chosen parallel sessions!

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**BCS SIGIST website: [www.sigist.org.uk](http://www.sigist.org.uk)**

**SIGIST Standards Working Party: [www.testingstandards.co.uk](http://www.testingstandards.co.uk)**

**SIGIST UML Testers Forum: [www.umltesters.org](http://www.umltesters.org)**

### Future SIGiST conference dates

**13 December 2007**

### BOOKING INSTRUCTIONS

1. Download a booking form from:  
<http://www.SIGiST.org.uk/bookingForm.pdf>

**FAX TO:**

Colin Chivers  
01793 417444

**OR POST TO:**

Colin Chivers  
Specialist Groups Officer  
First Floor, Block D  
North Star House  
North Star Avenue  
Swindon  
SN2 1FA

# EUROSTAR

## Stockholm is the place to be

The 15<sup>th</sup> EuroSTAR conference takes place in Stockholm in early December 2007. This is a return to the Swedish capital, with the European software testing conference usually located in one of the countries that support it well. Nevertheless, a 'home' venue will increase the number of delegates from that country.

Put the dates in your diary now; the first 1½ days are tutorials, with the main conference running from 14:00 on Tuesday 4<sup>th</sup> December → 17:00 on Thursday 6<sup>th</sup> December. After this, there is a Gala Dinner, where the testing community honours its own. This last event is a popular closing to the conference, and tends to sell out some 2 months before the start of the conference.

For me, EuroSTAR is a wonderful opportunity to meet old and new testing friends, and get some good perspectives upon testing challenges that we all face, but outside of the pressure cooker atmosphere of where I am working at the time (deadlines, poor quality code delivered, and scantily clad requirements documents).

Look at the EuroSTAR web-site <http://www.qualtechconferences.com/content.asp?id=2> when you are able, and aim to get people from your organisation there. You will see that the UK is well represented amongst the speakers (17 out of 50 speaking slots, and 3 out of 14 tutorials). There are also details of accommodation, and the pricing structure of the conference fees. On this last point, there are reduced rates for early bookings (by 28<sup>th</sup> September), and a 10% reduction for membership of some testing organisations (of which SIGiST is one). Special rates are available for group bookings.

At the June 2007 SIGiST meeting, I was fortunate enough to win the draw for a free EuroSTAR conference place. Having benefited greatly from attending these conferences in recent years, I want to encourage you to go. Then, before you go, plan what sessions you will attend, and go with an open, blank notebook. Many of my written entries are completed outside of the 'official' conference session, and I have built up testing friendships; I do not just stay around the people I know.

I hope to see you in Stockholm in early December – it will do us both good.

**Peter Morgan, freelance tester, Nicemove Ltd ([morganp@supanet.com](mailto:morganp@supanet.com))**

## ANNOUNCEMENTS

### **SIGIST Library**

Looking for a testing book but not sure which topics are covered? Or are you trying to decide which testing book to buy? Or do you simply want to increase your testing knowledge? If the answer to any of these questions is 'yes' then the SIGIST Library could help!

The SIGIST Library has lots of testing books covering a variety of topics and they are available to borrow for a period of 4 weeks - free of charge. Extended loans are allowed as long as the book has not been requested by another SIGIST member.

Topics include (amongst others) Requirements testing, Reviews/Inspections, Test Management, Techniques, Test Process Improvement

If you would like to know more about the library and books available, or for any queries, please contact Sue Atkins on 01697 748 748 or email her at [siglib@iotest.com](mailto:siglib@iotest.com). Alternatively, download the book loan form on the SIGIST website [www.SIGiST.org.uk](http://www.SIGiST.org.uk). Happy Reading!

## **PROGRAMME COMMENTARY: JOINED-UP TESTING**

### **Stephen Allott, Programme Secretary**

Joined up testing is the theme for the September conference and I thought it worthwhile to add a few words to try and explain my thinking. In my humble opinion, far too many people seem to claim to have a magic wand to fix testing or quality problems with software. Also, there are many testers out there that I meet who are looking for the "silver bullet" or "one size fits all" answer to their problems that will make their lives easier. Well, those of us working on testing projects in the real world know that testing is a complex and challenging task and that the solutions come from a variety of sources and in many different shapes and sizes.

So today's test manager has a lot to consider. Communicating between all stakeholders in the project using the right level of information, creating end to end tests based on realistic scenarios, choosing a flexible and appropriate development and testing model, involving the business in testing, introducing automated tools at the right time, balancing the resources onshore and offshore. A joined up approach to the problem seems to me to be a step in the right direction and I trust you'll find the September conference exciting and rewarding with many ideas to take away and implement in your own organisations.

## NEXT MEETING – PROGRAMME

### BCS SIGIST – Joined-Up Testing

Tuesday 18 September 2007

Royal College of Obstetricians and Gynaecologists  
27 Sussex Place, Regent's Park, London NW1

08:30	Coffee & Registration, Exhibition opens		
09:25	<b>Introduction and Welcome</b> <i>Stuart Reid, SIGIST Chairman</i>		
09:30	<b>Featured Speaker</b>		
	Extreme Testing: A Software Tester's Lessons Learned from Extreme Programmers Elisabeth Hendrickson, Quality Tree Consulting		
10:30	<b>Networking session and commercial break</b>		
10:45	Coffee & opportunity to visit the exhibition		
11:15	Implementing a Test Automation Centre <i>Victoria Pearson, BT Plc</i>	Intermediate Workshop (bring a wireless enabled laptop)  Web Testing under the bonnet <i>Paul Gerrard Gerrard Consulting</i>	<b>Featured Speaker</b>  Advanced Workshop  Adapting to Agile <i>Elisabeth Hendrickson Quality Tree Software Inc.</i>
12:00	Lessons Learnt Implementing DDP <i>Richard Durham, Citrix</i>		
12:45	Lunch & opportunity to visit the exhibition		
13:45	Testing: It's in the Game <i>Chris Ambler, Electronic Arts</i>	Intermediate Workshop  Web Testing under the bonnet <b>Part 2</b>	<b>Featured Speaker</b>  Advanced Workshop  Adapting to Agile <b>Part 2</b>
14:30	Joined up testing: A Rightshore™ case study <i>Peter Hanson, Capgemini UK</i>		
15:15	Tea & opportunity to visit the exhibition		
15:45	<b>Live and Unscripted</b> <i>Stephen Allott talks to Paul Gerrard about current projects</i>		
16:00	<b>Featured Speaker</b>		
	<b>Test Automation: The Next Generation</b> Elisabeth Hendrickson, Quality Tree Software Inc.		
17:00	Closing Remarks		

Workshops MUST be booked in advanced, as places are limited

The SiGiST committee reserves the right to amend the programme if circumstances deem it necessary. Workshops will have limited places, to avoid disappointment try to book in advance.

## ABSTRACTS AND BIOGRAPHIES

### Featured Speaker:

#### **Elizabeth Hendrikson, Quality Tree Software Inc.**

Elizabeth Hendrickson founded her company as Quality Tree Software Inc. in 1997 to provide training and consulting in software quality and testing. She incorporated the company as Quality Tree Software, Inc. in 1998.

Elizabeth began working in the software industry in 1984. She has held positions as a Tester, Programmer, Test Automation Manager, Quality Engineering Director, and Technical Writer working for companies ranging from a 20-person startup to a large multi-national software vendor.

Elizabeth is an experienced facilitator and trainer. A student of Jerry Weinberg's, Elizabeth is a graduate of the Weinberg & Weinberg PSL, ChangeShop, and SEM programs. She also studied Experiential Training Design with Jerry and his wife Dani.

Elizabeth is frequently invited to speak at conferences around the world. She has given keynote addresses at conferences in the US, Sweden, Portugal, and Australia.

In 2003, Elizabeth became involved with the Agile community. In 2005 she became a Certified Scrum Master and in 2006 she joined the board of directors for the Agile Alliance.

These days Elizabeth splits her time between teaching, speaking, writing, and working on Extreme Programming teams with test-infected programmers who value her obsession with testing.

#### **Abstract: Extreme Testing: A Software Tester's Lessons Learned from Extreme Programmers**

Extreme Programming (XP) teams are test infected. They practice Test Driven Development (TDD), writing an executable unit test before writing the code to be tested. Many also practice Acceptance Test Driven Development (ATDD), writing executable acceptance tests before implementing a feature. They use Continuous Integration (CI) to give them rapid feedback about the effects of changes. They practice pair programming, a technique that results in all code being peer reviewed before it's checked in. In short, XP teams test continuously from the very first moment of any given project. You could even call them Test Obsessed. That explains why Elizabeth Hendrickson, author of [www.testobsessed.com](http://www.testobsessed.com), likes XP teams so much. As a professional tester, Elizabeth has spent the last several years on a quest to discover how testers can contribute effectively on Extreme Programming projects. In this talk, Elizabeth shares her experiences as a tester and programmer (yes, programmer) on XP teams, and the sometimes surprising lessons working on XP teams has taught her about effective software testing.

#### **Abstract: Test Automation, the Next Generation**

Development tools have become orders of magnitudes more powerful in the last several years with intellisense; keyword coloring; automated refactoring across entire code bases; tight integration with xUnit-style unit testing frameworks; and tight integration with source control repositories. While we've seen huge leaps in development tools, tools to support functional testing haven't kept pace.

The biggest steps forward in test automation include the idea of Domain Specific Languages, and frameworks like FIT and Fitness that break down barriers between developers and testers or subject matter experts. And yet there is still a long way to go, and we're overdue for a major step forward in functional testing tools.

Several people have begun prototyping test automation solutions that could hold the keys to a giant leap forward. In this talk, Elizabeth Hendrickson explains what's missing in the current generation of test automation solutions while providing an inside look at what's next.

## **Abstract: Adapting to Agile**

When a software development team adopts an Agile process such as Scrum or XP, QA team members often find that their traditional practices no longer fit the new context. Extensive up front test planning and design, heavyweight test documentation, and formal entrance and exit criteria all serve a traditional context well, but tend to get in the way in an Agile environment.

In this workshop, participants experience a transition to Agile in a paper-based simulation (no programming required). In a series of iterations, the team attempts to deliver a product that the customer is willing to buy. Each successful delivery generates revenue for the company. But as with real projects, producing a working product on a tight schedule can be challenging.

After each iteration, participants reflect on key events, then adjust their team practices to increase their productivity for the next iteration. As a result, participants learn to apply the principles of visibility, feedback, communication, and collaboration to increase their rate of delivery. By the end of the workshop, participants will have a visceral understanding of Agile, and in particular the shifting role of Test/QA in Agile development.

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## **Richard Durham**

Richard has been testing software professionally for over a decade in a variety of different industries. Richard has presented at both EuroStar and StarEast on Agile testing practices but also maintains a strong interest in testing metrics and the use of small scale test automation with model based testing. Richard is currently employed at Citrix.

## **Abstract: Lessons Learnt Implementing DDP**

Defect Detection Percentage has been described as one of the most important testing metrics. In theory it is a fairly simple metric – what percentage of the total number of defects in a release were found internally (which be extension tells you what percentage was found by the end users/customers. In this presentation find out what happened when DDP is put into practice in a large software company.

## **Victoria Pearson, Head of Testing at BT**

Biography not yet available.

### **Abstract: Implementing a Test Automation Centre**

BT Group is remaking itself into a global leader in the market for networked IT services in part by undertaking the largest and most ambitious network transformation project in the telecom industry. BT's £10 billion 21st Century Network (21CN) programme will create an integrated voice and data network that will drive a new wave of converged products and services while drastically reducing network operations costs. To get there, BT is adopting new techniques and strategies for system and product development, emphasizing the need to reduce project cycle times while simultaneously increasing the percentage of things "done right the first time." A key component of this effort is end-to-end testing and, in particular, a massive automated testing initiative.

While in the early stages of test planning for the 21CN programme, it became apparent that the only way to meet the proposed timetables was through the aggressive use of test automation. BT determined that its limited pool of experienced testers would be better used in defining test requirements and designing test cases rather than working on automation. BT then collaborated with an Indian partner to establish a cost-effective, offshore team focused entirely on automation. In effect, BT decided to industrialise the production of test scripts in this newly created Test Automation Centre (TAC).

BT tests each new system and process both from the operations and management perspective and the customer perspective. This process is achieved using a team of about 130 employees producing automated scripts, running them and reporting on the results.

The TAC also employs approximately 150 manual testers which includes test managers, test designers, test environment support people and actual testers.

In order to make the whole process work effectively and provide the benefits that justified the cost, BT had to consider many other factors. One of the early challenges was to identify tests that should not be automated due to technical difficulties that would make automation too costly. BT considered factors such as the frequency of test runs, lifespan of tests, cost of automation vs. the cost of manual testing and cost of script maintenance.

In addition to the time saving benefits of automating the testing process, BT also found additional benefits such as identifying errors and omissions in the tests and identifying bugs in the applications that had not been spotted by manual testers.

Additionally, BT has employed simple automated scripts to provide ongoing hourly error testing to confirm that all the major components in its very complex test environments are up and running. Lastly, BT has used automated scripts to cleanse data on a regular basis.

## **Paul Gerrard**

Paul is the founder and Principal of Gerrard Consulting, a services company focused on increasing the success rate of IT-based projects for clients. He has conducted assignments in all aspects of Software Testing and Quality Assurance. Previously, he has worked as a developer, designer, project manager and consultant for small and large developments using all major technologies and is the webmaster of [gerrardconsulting.com](http://gerrardconsulting.com) and several other websites.

He has degrees from the Universities of Oxford and London, is Web Secretary for the BCS SIG in Software Testing (SIGIST), Founding Chair of the ISEB Tester Qualification Board and the host/organiser of the UK Test Management Forum conferences. He is a regular speaker at seminars and conferences in the UK, continental Europe and the USA and was recently awarded the "Best Presentation of the Year" prize by the BCS SIGIST.

Paul has written many papers and articles, most of which are published on the web. With Neil Thompson, wrote "Risk-Based E-Business Testing" – the standard text for risk-based testing. He is a regular keynote speaker and tutorial presenter and has presented over 200 talks at conferences in the UK, continental Europe, USA and Australia since 1993. He is also a coach for Maidenhead Rowing club.

### **Abstract: Web Testing Under the Bonnet**

Most system and acceptance testing of web and internet applications is still done manually. The test automation tools that do exist are all GUI-based, proprietary and expensive. GUI test tools are incredibly sophisticated and usually require programming skills to operate. Most of the complexity is required to deal with the vagaries of the GUI, not the essential tests themselves.

Testing Frameworks are emerging as the required 'front-end- to' test execution tools. But what is happening here? The complexity of the GUI is managed by two test tools and the browser. We aren't testing those, are we? For the purpose of most functional testing is to execute transactions on the web server and supporting infrastructure. The browser is just a means of presenting a usable interface to a human being.

What if we separated our tests into those which require the user interface, and those which do not? The tests that must use the user interface can be run manually or using a proprietary tool. We can use free tools to test under the GUI. These tools are much faster, simpler and easier to use than GUI test tools.

**Bring a laptop and use a real tool to test on our portable wireless networked environment. You will need a laptop with wireless capability or a 5m standard network cable or be prepared to share with a colleague.**

## **Peter Hanson, Capgemini UK**

Peter is a Senior Test Manager at Capgemini, a global leader in consulting, technology, outsourcing, and local professional services. Headquartered in Paris and operating in more than 30 countries, Capgemini has approximately 75,000 employees.

Peter's role at Capgemini includes consulting, strategy and project delivery work for clients, and the development of capability within the organisation's community of testing professionals. He has broad-ranging experience in the software industry: as a business manager he worked with the financial, telco, aerospace and defence industries, founded in an initial career as a systems designer and developer.

### **Abstract: Joined-up testing – a Rightshore™ case study**

This presentation describes testing in a joint onshore/offshore project which is currently underway for a client. With a “perfect storm” of fixed price, a fixed – and very visible – delivery date and rigorous quality requirements, a joined-up testing approach is the only possible solution.

The system is being developed for an independent non-governmental regulatory body, and will enable its customers to report against a clear, consolidated reporting schedule. It will provide the flexibility to amend the reporting required as new legislation takes effect or the scope of regulation changes; it must also handle expansion in the numbers and types of organisations within the regulatory remit.

An iterative methodology is being used to shape the project requirements, design, development and testing. The application is also being developed using a Rightshore strategy to maximise the project's cost-effectiveness, with some 80 per cent of its 60-strong project team being based at an Application Development Centre in Mumbai, India.

The operating approach for Rightshore uses global delivery to place processes, services and functions in the best location, blended and coordinated to meet specific business goals:

- on site, at the client's offices - for example for business requirements analysis and UAT
- on-shore - delivering specialist methodology and application architect services in Woking
- off-shore - using large-scale development and testing services in Mumbai to provide capacity, capabilities and competencies at reduced costs - without compromising product and service quality.

So the challenge for project testing is to join up processes across

- geographies and time zones
- project disciplines, and
- client and third-party stakeholders

.... all set against the background of an iterative project in a fast-changing environment.

The presentation discusses the testing approach taken, the lessons learned so far – and the plans for the future of testing on the project.

## ARTICLES

### The Exploratory Tester's Logbook

#### James Lyndsay, Workroom Productions

A particular phrase has rung through my life as an experimenter. I can remember the day I first heard it, and it's followed me round ever since. Let me set the scene. It's Double Physics. I'm sitting in a classroom - not our usual one, with the high lab desks and the ticker-tape timers, but a smaller one. One where a precious video recorder can be connected to a jittery television without interference from crocodile clips and galvanometers.

On screen, a succession of experiments. Bits of metallic stuff are being dropped into dishes of water. Before each experiment, we're shown chemical symbols, the periodic table. The voice from the screen says 'Write it down'. We do. We're shown the weight of the stuff, its colour, the ambient temperature, the volume of the dish, the air pressure. Each time, the voice from the screen tells us to 'Write it down'. We do, navy-blue hardback lab notebooks balanced on knees and the tops of seatbacks. We write it all down. The stuff drops into the water, nothing happens. We write it down. The camera zooms in; nothing. We write it down. Another experiment, more stuff. Still nothing happens. Still we write it down.

And so we get used to the nothing. When the metal looks odd after a moment or two's submergence, we write it down. When a sheen of tiny bubbles gradually creeps over it, we write that down too. When the first, single bubble escapes its hold and rushes to the surface of the water, we write it down.

The next hunk of junk promptly surrounds itself with a silver sheath of gas, and as it bobbles on the bottom of the bowl, we realise we really should have used a stopwatch. It's the 80s - so the geekier and richer among use are using their digital watches. Another experiment fizzles like an aspirin, the next positively leaps about. We're shown more metal - it's yellow grey and skinned with oil - the voice tells us it is Cadmium. We write it down. There's barely a moment after it hits the surface of the water, and the bowl explodes. Water pours from the shards, soaking the black cloth that covers the studio table. Steam rises. We write it down.

Oddly enough, I've no real idea if that last bit of stuff was cadmium. The choice of subject seems odd, now I think of it, for a Physics lesson. Perhaps it was Double Chemistry - but I've always hated Chemistry. I'm twenty-five years older, and writing it down hasn't helped me retain many of those facts at this distance. The lesson itself, however, has followed me round, whispering 'write it down' in labs and libraries, concerts and car journeys, wrapping my fingers around a pen or pushing them over a keyboard even as my eyelids drop and I'm called in to bed. I've used notepads, jotters, exercise books, Moleskins, dictaphones tape and digital, Palm Pilots, laptops. Everywhere I've gone, everything I've done, I've written it down.

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My life, then, is filled with scraps of rubbish paper, tapes, files in obscure formats. It'll come as no surprise that I've been writing notes throughout my time as a tester. For me, recording what I do is fundamental to doing it. I believe that I do a better job, just because I'm making notes. My mind is clearer, my concentration better, my decisions more justified - and sometimes, more surprising. It's a pain to find that I'm halfway through something, and I've lost my notes. It's worse to find I've not been making any - because although I do it more often than not, writing stuff down is hardly my default behaviour.

Last year, I made a loaf of sourdough bread every week for six months; not a note to be seen. I started to make notes - had to find paper, made less bread, got wet flour in the laptop - but the bread got better. Way better. Why did I kid myself by not bothering?

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Sometimes, I teach people to test - and sometimes, I teach the systems beneath the peculiar magic that is exploratory testing. I teach - and advocate - *session-based* exploratory testing, and making a reasonable log of what is done in a session seems to be a particular problem for my student explorers.

I've coached good testers, who show me three lines of post-test scribble to describe ninety minutes of exploration. I've worked with interested and well-informed teams, with only a buglog to show for their efforts. I've had a class full of people look at their pretty session templates, and write not one thing - not a bug, not a plan, not a target for testing, not their name or a date in the labelled boxes at the top of the paper. It strikes me, at these points, that perhaps I'm getting something wrong in my teaching.

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I guess the most immediate thing I want to explain when I see an empty test log is *why* one might want to keep good notes. Better still, *how* keeping good notes can help. Lets do that, just to tick some of them off:

- Writing notes is one way of clarifying ones thoughts, one way of identifying imprecision and hidden assumptions.
- Keeping to the discipline of writing notes helps you recognise when you're being inappropriately distracted by an interesting problem – and lets you make that problem to let you come back
- With notes to consult, you are more able to make decisions based on the information, not on habit or expectation
- You don't have to remember everything – if you write it down you can move on with a clear mind
- The notes are a mnemonic; you'll remember more when you come back
- You can show your notes to someone else, any time you like
- You can demonstrate that you've actually been working
- Notes don't decay over time

Perhaps there are a bunch of 'why not's. If you loaded a noteless tester with truth serum and asked away (not something I've yet tried - but that serum's tricky stuff to administer in a classroom), what might they say?

- I don't have time
- Note-taking disrupts my testing karma
- I don't want to get caught doing a bad job
- Doing the work is more interesting than keeping notes
- I don't think it helps, so I'm not going to try, even in this classroom, even after you've pleaded with me to give it a go, even after you've told me my every effort is worthless without the backup that notes provide

Perhaps it's the means of recording that causes problems. I use paper and a pencil, which may be a hangover from my schooldays, but has the advantage of continuing to work when the computer stops. When I need something more sophisticated and searchable, I use outlining software and attach my machine to a camera or to the test machine so I can infiltrate my outline with pictures and files. I don't think that the way you make a log is terribly important, so long as it doesn't get in the way of making a good record, and lets you take in a chunk of testing at a glance. For the record, I think that notepad is a dreadful tool for making a worthwhile log.

Perhaps it would help to show the key that I've arrived at over the years that seems to do a good job of helping me pick out information from my test logs; Here are markers that I put at the start of important lines.

- A new thought or action.
- \* A more important thought or action - sometimes used for 'return to this'
- ! One you'll want to remember at the end of the test. Sometimes reserved for bugs.
- [ An aside - a thought or observation that needs to go down, but that isn't in the flow]
- ¿ Something I'm not sure of - may need more tests. A question for *me*.
- ? A question for someone, or something

Plenty of arrows and circles - not forgetting diagrams, underlining, tables etc.

However, I have another idea. I think that some testers might not have had that voice in their head for most of their adult life, telling them to Write It Down. Some testers just haven't been Writing It Down. Indeed, it is possible, I believe rather patronisingly, that some testers really aren't altogether sure *What* to Write Down.

Me? I carried on with Physics until I graduated. Then I segued neatly into testing, which I've done for years, too. I never really knew what to write down, but I wrote it down anyway. A quarter of century of notes. If you're a compulsive writer-down of unconsidered trifles, I suggest you need read no further. On the other hand, if you'd like a shortcut to my personal take on the Secret Stuff that should be Written Down, I crave your attention for a few paragraphs more.

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If you make a plan for your session, write it down. If you're just tootling along all planless, you need a strategy, an approach. A sticky note will do. There are no excuses – accept no substitutes.

You'll want to remember the actions you take, the data you use, your expectations, your observations - including the time. Don't necessarily limit yourself to exactly what you're testing - you're working in some kind of context. You'll get better at this over time; there's an instinct that comes with practice that lets you separate the wheat from the chaff. There's always going to be a bit of chaff.

Keep track of things that repeat. Even if nothing happens. Dullness is a virtue in most working systems. And without track of dullness, how will you notice . .

Surprises. Is that a goat among the sheep? If you didn't expect it, it's worth writing down. If someone else wouldn't expect it, it's a bug. Perhaps you've seen an exploitation. Have you a hypothesis? Are you making a model? And when you've supported your hypothesis, found a potential bug, had a surprise, or the dullness is just too much to bear, you need to . . . .

Make a Decision - many people get so used to testing by instinct, or by the book, that they don't notice they're making decisions. Worse, they've no idea what the decisions might have been. Scripted testing can be decisionless, but decisions are *key* to exploration. When you decide to take a different approach, to try different data, or just to consciously do exactly the same thing again, but watching more closely this time, you're taking a decision. Make a quick note.

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A lot to keep track of? Sure – but that's *why* you write it down. You *can't* keep track of all this stuff without a bit of paper by your side, Superman. Just as integrated test design has strange and positive effects on the quality of your code, integrated note-taking works wonders on your testing - and on your thinking.

A bare minimum? I always have a spare moment for a bare minimum. For me; strategy, data, surprises, decisions. For you, something else. Keep notes, and you'll be there in no time. It's not hard, it's not dull, but it needs a little persistence, a little focus, a little discipline. So; if this article has triggered one new idea, a decision, an observation, a single spark of intent or insight, I urge you to stop reading, right now, take pen and paper and . . .

**Write it down.**

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James Lyndsay is a test strategist.

See [www.workroom-productions.com](http://www.workroom-productions.com)

## **Gonzo QA IV: Mistakes, I've made a few**

**By Martin Cunnington**

My biggest mistake was to delete the UK master invoice file of the major chemical company I worked for at the time, shortly before going home for the evening. I had been promoted to Database Administrator (DBA) a few weeks before and I was carrying out routine house-keeping activities – or so I thought. It turned out that my recently-departed predecessor had not been naming database objects logically, had not been carrying out routine house-keeping activities and further, the database management system (DBMS) was quite capable of deleting files in use without warning or protest. The result of all this was I went home unaware. Further, the overnight batch file which wrote the days invoices to the master file and then deleted itself wrote the days invoices to null and then deleted itself. When I came in the next day, Accounts Receivable staff had just been told that as well as inputting the day's invoices, they would have to re-input the previous day's too, essentially doing two days work in one day and nobody was to go home until it was done. They gave me the cold shoulder, the Finance Director gave me an earful which included the full cost of my error rounded to the nearest five thousand pounds and the IT Director sent two of his people down to give me a kicking on his behalf. The Senior Systems Programmer beat me up himself; he always was a hands-on kind of guy. The previous night's dump had been restored in my absence but it turned out that transaction logging had never been enabled, so roll-forward until a few minutes before I had accidentally deleted the file was not possible. At the time I did not know that you could run a DBMS without transaction logging enabled. My response of "how about that?" was not appreciated by sysadmin staff at all.

This incident was my first true insight into the importance of recognising, assessing and managing risk, whether or not it is part of your job description.

I failed to recognise the risks I was accepting during the hand-over from my predecessor. I had assumed that he had been approaching his work logically and by the book. He had not. He had an idiosyncratic approach which worked for him but, rather spectacularly, did not work for me. I had assumed that the DBMS contained a series of checks and balances which would aid me in my work. It did not. It did what it was told immediately and without question. I had assumed that transaction logging was turned on. It was not. An investigation the previous year had concluded that transaction logging required too many valuable CPU cycles and too much valuable disk space, i.e. it was too costly to implement when compared to the potential return.

Having made a whole series of false assumptions, I had failed to identify and assess the risks inherent in my new job. What was I required to do that might be risky? How was I going to do it in a way more likely to succeed than fail? What would be the impact of failure? What would I do if things failed? What could others do if things failed in my absence? What alerts would signal failure and who would receive them?

Having failed to recognise and assess the risks, there can be no surprise that I was not managing risk in a meaningful fashion. All of which changed after this incident, of course. Everyone involved now recognised that a risk existed. Senior management recognised that they might have been complacent in vetoing the cost of transaction logging. The revenue lost by my error was approximately twice the cost of installing and running transaction logging for a year. I was encouraged to buy and build a suite of tools to minimise the risk of human error when carrying out my tasks. I was also given permission to build a test installation; now I didn't have to do everything straight on to live, I could safely practice somewhere else first.

Although this story is twenty years old, it is still relevant today. I work in a fast-paced, high-pressure environment and it is not unusual for a project to go through a complete change of personnel on both the agency and client side as it races from a bright idea to a shiny finished product. A new team member, especially one subbing for another, will typically assume that all is well with the project so far, and want to build their contribution on top of the sound foundations built by their predecessors. I encourage staff to recognise that this is not necessarily so and to assess the situation in as much detail as possible, given the circumstances. This then allows them to consider mitigating, eliminating or otherwise insuring against the major risks they have identified. Should the only reasonable course of action turn out to be to tolerate the risk, then at least this is done in an informed way rather than by default (which is what I did). I consider this to be part of on-going quality planning. As a software quality assurance professional, I have seen many deep issues identified during quality control that

can be traced back to new project team members unknowingly building their structures on sand. What a waste.

For further articles on how I apply lessons learned from my mistakes in the past to my current position, please visit [www.participationmarketing.co.uk](http://www.participationmarketing.co.uk)

#### **About the author**



Martin Cunnington is Head of Quality Assurance at MRM Worldwide, a leading digital marketing agency servicing the world's bluest of blue chip companies. A Chartered IT Professional, his influences include Alan Turing, Mark Rothko, Isambard Kingdom Brunel and Hunter S Thompson. Martin is currently LinkedIn and battling a facebook addiction.

P.S. Anyone who thinks that hand-over is only a risky business in the world of IT should speak to members of a 400 metre relay team.

Issue  
**22** **THE TESTER**  
*December 2007 Issue*

**NEXT CONFERENCE**

**Thursday**  
**13 December 2007**

**Joined-Up Testing  
(Part 2)**

- **Special Testing Skills of a Person with ASD**
- **Making Regression Testing Cheaper**
- **Increasing Test Effectiveness Using Graphical Test Planning**
- **Preparing a Business Case and Plan for Investment in Test**
- **The Challenges and Solutions of Maintaining Application Reliability**
- **Extreme Boundary Testing**
- **Effective Test Process Improvement**
- **Exploring the Benefits of ASD Resources**
- **Benefits of Formal Inspections at Microsoft**
- **Managing Complex Test Environments**

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**Next Meeting – Programme**

**What's the collective noun for testers?**

**Abstracts and Biographies**

**An Industrialised Approach to Test Automation**



Please note that any views expressed in this Newsletter are not necessarily those of the BCS.

## FROM THE EDITOR

The year's flown again and here we are promoting the last conference of 2007!

Steve Allott has worked hard to produce an interesting and varied programme and so I hope that you will earmark the day of Thursday 13 December to attend.

As usual there are parallel sessions in break-out rooms that have a limited amount of accommodation, and so it is most important that you send in your booking form as soon as possible to make sure that you are not disappointed with your choice of workshop on the day.

If you have eg. a notice board or coffee table at work where testers congregate (are they allowed breaks?!) then please display copies of The Tester to spread the word about the SIGiST conferences, and the linked organisations/working groups. We are always surprised that there are still lots of testers out there who are not aware of our activities, and this is of course particularly so for those new to testing.

I hate to say it now, but I'll be wishing you a good Christmas when we meet on the 13<sup>th</sup>!

Pam Frederiksen  
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Email: [pam@leysen.com](mailto:pam@leysen.com)

**BCS SIGIST website: [www.sigist.org.uk](http://www.sigist.org.uk)**

**SIGIST Standards Working Party: [www.testingstandards.co.uk](http://www.testingstandards.co.uk)**

**SIGIST UML Testers Forum: [www.umltesters.org](http://www.umltesters.org)**

**Future SIGiST conference dates**

**18<sup>th</sup> March 2008**

**18<sup>th</sup> June 2008**

**18<sup>th</sup> September 2008**

**9<sup>th</sup> December 2008**

## BOOKING INSTRUCTIONS

1. Download a booking form from:  
<http://www.SIGiST.org.uk/bookingForm.pdf>

**FAX TO:**

Gemma Liddiard  
01793 417444

**OR POST TO:**

Gemma Liddiard  
Specialist Groups Officer  
First Floor, Block D  
North Star House  
North Star Avenue  
Swindon  
SN2 1FA

## ANNOUNCEMENTS

### **SIGIST Library**

Looking for a testing book but not sure which topics are covered? Or are you trying to decide which testing book to buy? Or do you simply want to increase your testing knowledge? If the answer to any of these questions is 'yes' then the SIGIST Library could help!

The SIGIST Library has lots of testing books covering a variety of topics and they are available to borrow for a period of 4 weeks - free of charge. Extended loans are allowed as long as the book has not been requested by another SIGIST member.

Topics include (amongst others) Requirements testing, Reviews/Inspections, Test Management, Techniques, Test Process Improvement

If you would like to know more about the library and books available, or for any queries, please contact Sue Atkins on 01697 748 748 or email her at [siglib@iotest.com](mailto:siglib@iotest.com). Alternatively, download the book loan form on the SIGIST website [www.SIGiST.org.uk](http://www.SIGiST.org.uk). Happy Reading!

## **PROGRAMME COMMENTARY: JOINED-UP TESTING (2)**

**Stephen Allott, Programme Secretary**

Welcome to our December programme which continues with the theme of joined up testing. My vision and hope is that SIGIST members will be able to take away not just one but many practical ideas from these conferences that can be implemented in their organisations right now to help save precious time and money in their testing activities. There is unfortunately not one single answer, one silver bullet that might solve all your problems; so in my opinion that's why you need joined up testing – to address all areas of the SDLC and make improvements and try out new techniques in as many areas of your workplace as possible. We have a truly international lineup for December with speakers from the USA and Canada as well as from the UK so I hope you enjoy the conference and please do sign up for those workshops early to avoid disappointment as numbers are strictly limited.

## NEXT MEETING – PROGRAMME

### BCS SIGIST – Joined-Up Testing (2)

Thursday 13<sup>th</sup> December 2007

Royal College of Obstetricians and Gynaecologists

27 Sussex Place, Regent's Park, London NW1

<b>08:30</b>	Coffee & Registration, Exhibition opens		
<b>09:25</b>	<b>Introduction and Welcome</b> <i>Stuart Reid, SIGIST Chairman</i>		
<b>09:30</b>	<b>Opening Keynote</b>		
<b>09:30</b>	<b>Special testing skills of a person with ASD</b> Thorkil Sonne, Specialisterne, Denmark		
<b>10:30</b>	<b>Networking session and commercial break</b>		
<b>10:45</b>	Coffee & opportunity to visit the exhibition		
<b>11:15</b>	Making Regression Testing Cheaper <i>Mark Harman Kings College London</i>	<b>Workshop M1</b> Preparing a business case and plan for investment in test <i>Declan Kavanagh</i> <i>Insight Test Services</i>	<b>Workshop M2</b> The challenges and solutions of maintaining application reliability <i>Sam Clarke</i> <i>nFocus Ltd</i>
<b>12:00</b>	Increasing test effectiveness using Graphical Test Planning <i>Hardeep Sharma, Citrix Systems</i>		
<b>12:45</b>	Lunch & opportunity to visit the exhibition		
<b>13:45</b>	Extreme boundary testing <i>Rob Sabourin</i> <i>AmiBug.com Canada</i>	<b>Keynote Speaker</b> <b>Workshop A1</b> Exploring the benefits of ASD resources <i>Thorkil Sonne</i> <i>Specialisterne</i>	<b>Keynote Speaker</b> <b>Workshop A2</b> Benefits of formal Inspections at Microsoft <i>Marquis Harding</i> <i>Microsoft USA</i>
<b>14:30</b>	Effective Test Process Improvement <i>Fran O'Hara</i> <i>Insight Test Services</i>		
<b>15:15</b>	Tea & opportunity to visit the exhibition		
<b>15:45</b>	<b>Book Review</b> <i>Sue Atkins reviews "Balancing Agility and Discipline"</i>		
<b>16:00</b>	<b>Closing Keynote</b>		
<b>16:00</b>	<b>Managing Complex Test Environments</b> Marquis Harding, Microsoft, USA		
<b>17:00</b>	Closing Remarks		

The SiGiST committee reserves the right to amend the programme if circumstances deem it necessary. Workshops will have limited places, to avoid disappointment try to book in advance.

## What's the collective noun for testers?

Tom Mathias

A throw-away piece of 9.05am small talk became an interesting area of study for me.

The study came from a fatuous rhetorical: "What is the collective noun for testers? 'A worry of testers'?(!) 'A despair of testers'?(!)" posed to a colleague (a solution architect) hemmed in by mountainous stacks of documentation, printed emails and the entire test team.

Raising this in the pub, during training, and in writing this article, I realised that to find the most appropriate term, I would think about what good testers do, how they behave and how they are perceived.

During a flick through a thesaurus to get creative juices flowing, I paused at the synonyms for 'true' for their various definitions:

1. Verifiable
2. Consistent
3. Accurate
4. Honest
5. Be realised (from "to come true")

I realised that, not only were these definitions all possible contenders for a suitable collective noun but, they could all give positive lessons for testers.

### 1. Verifiable

I had always assumed through my undergraduate studies and subsequent study and work, that testing was in some ways like training to be a Drug Enforcement Agency officer<sup>1</sup>, in that *"it's not what you know; it's what you can prove"*.

Ultimately that is what the 'Actual Results' and 'Steps to Replicate' sections of testing documents provide testers with an opportunity to do. It is what is expected of testers.

### 2. Consistent

A consistent quality of work a tester or team provides and their work's adherence to company, national and international standards builds integrity. It allows colleagues to make useful, realistic working assumptions about what a person or team can produce/provide. However, that is not to go against my favourite metaphor; one that ensures that testing effort is spent on a product where it is most needed: *"Good testing is like strawberry jam; it has lumps in it."*<sup>2</sup>

### 3. Accurate

I am certain that you will (whether consciously or not) be looking for spelling, punctuation or grammatical defects in this article.

I am also certain that you are glad I used the word defect to be consistent with the SIGIST Error → Defect → Failure model.

### 4. Honest

An aspect of good testers that I have noticed is a lack of ego and the ability to not fall prey to positive dishonesty. It is easy to let ambition, the quest for reputation or a willingness to please lead to agreements which can put testers at a disadvantage with their resources and their patience.

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<sup>1</sup> See the film Training Day (2001): <http://imdb.com/title/tt0139654/>

<sup>2</sup> Grove Consultants ISTQB Material: <http://www.grove.co.uk/>

The best work, especially objective communication and defect reports, comes from honest testers who carry out their work without fear or favour.

5. Be realised

Everybody likes seeing their work pass agreed exit criteria on time and in budget.

It is not hard to see that these are all aspects of valuable testers or anyone you would want to work with.

I'm sure you will have your own opinion, but after thinking on this, I can say, truthfully, that I'm quite fond of 'a veracity of testers'.

## **An Industrialised Approach to Test Automation**

### **BT, Test Automation Centre**

*By utilising an industrialised approach to test automation the BT 21<sup>st</sup> Century Test Team have succeeded in making automation work on a massive scale*

#### Introduction

BT's is remaking itself into a global leader in the market for networked IT services in part by undertaking the largest and most ambitious network transformation project in the telecom industry. BT's £10 billion 21<sup>st</sup> Century Network (21CN) programme will create an integrated voice and data network that will drive a new wave of converged products and services while drastically reducing network operations costs. To get there, BT is adopting new techniques and strategies for system and product development, emphasizing the need to reduce cycle times while simultaneously increasing right first time percentages. A key component of this effort is customer experience end-to-end testing and, in particular, a massive automated testing initiative.

This isn't the first time BT has tried automated testing. But past attempts were smaller and produced only modest results. The current effort is unprecedented in scale and speed. In just over a year, BT has created a fully functioning, offshore testing centre that is capable of running tens of thousands of automated testing scripts. In 16 months, the initiative has already paid for itself.

#### Lessons learned from previous attempts at automated testing

BT learned from past attempts at automated testing. One of the key findings was that testers need to understand the software in order to write automated test scripts. Without this experience, when they did use the software it was usually only at the simplest level (basic capture/replay). Whilst this approach worked, it prevented BT from realizing the full benefits of automation (such as modularisation, data externalisation and re-use) that results from completely embracing automation tools.

BT learned other lessons as well. Among them was the need to develop appropriate cost models that incorporated the acquisition of the proper testing tools. BT also found that it helped to incentivize testers to use tools rather than simply expecting them to be used. Moreover, automated testing required not just an emphasis on building scripts, but a mandate to use them. The bottom line is that for test automation to be successful it must be applied in the right place, at the right time, by the right people and with the right cost model.

#### Initial planning

When BT was in the early stages of test planning for the 21CN programme, it quickly became apparent that the only way to meet the proposed timetables was through the aggressive use of test automation. At the same time, BT determined that its limited pool of experienced testers would be more effective in defining test requirements and designing test cases rather than working on automation. So BT decided to work with an Indian partner to establish a cost-effective, offshore team focused entirely on automation. In effect, BT decided to industrialise the production of test scripts in this newly created Test Automation Centre (TAC).

## Making it work

21CN is BT's next generation network - an advanced communications network for the future. An end-to-end IP-based network, 21CN will consolidate BT's complex network and systems infrastructure to ensure that the delivery of the next generation of converged services is faster, more efficient and more cost-effective than ever before. But 21CN is not simply a network transformation; rather it's a radical overhaul of products, systems, process and a fundamental remaking of BT's business.

The systems capabilities include plan and build, lead-to-cash, trouble-to-resolve, and transfer engineering. Lead-to-cash is the experience whereby a customer buys an existing service from BT. It starts with a sales opportunity and the initial contact between the customer and BT to understand and agree the customer's needs. It completes when this need is fulfilled, the working service is available to the customer and BT has received its first payment. Trouble-to-resolve starts when a customer problem, or impending problem, is identified either by the customer or, increasingly, proactively by BT. It ends when that problem has been resolved to the customer's satisfaction. Transfer engineering is the software and processes to transfer all BT's customers and services from the 20CN network to the new 21CN. BT tests technology, processes and people both from the operations and management perspective and the customer perspective. This is a huge undertaking.

BT estimates that without automated testing, it would have taken twice the number of testers to validate each system and process. BT currently has a team of approximately 150 manual testers, including test managers, test designers, test environment support people and actual testers. There are about 130 people on the automation team producing automated scripts, running them and reporting on the results. This team was initially created for 21CN but is now as a shared service across BT.

Communication and collaboration are essential to the success of the TAC. While the TAC's testers are skilled at automation, they generally had no knowledge of the applications being tested. This led BT to designate Subject Matter Experts (SMEs) within the test teams for each area of business functionality. SME's initially provided the automators with an introduction to the application and the business functionality being tested and subsequently collaborated with them as test scripts were developed and run. As it turns out, few test cases written for manual execution by an experienced tester have the level of detail required by an automated script. So automators would often consult with SMEs regarding questions and clarifications. To get around the geographic separation of the testers and the automators, BT relied on a variety of communications channels, including conference calls, NetMeetings and movie files.

Once the automator believed a script was ready, it still needed to be checked by the tester to confirm that it executed the test as required and that the results were reliably accurate. Once this check was completed the script could be considered "operational" and used in the "real world" to replace a manual test.

## Quality, re-usability, ROI (Return on investment) and other factors

While the description of the process may seem simple, in practice its execution is not. In order to make the whole process work and provide the benefits that justified the cost, BT had to consider many other factors. For each application or business area, BT needed to define a framework for how to automate the tests.

BT recognized that to get the most ROI, its automation framework must provide the greatest efficiency and maximum re-use while minimising future maintenance. One of the early

challenges was to identify tests that should *not* be automated due to technical difficulties that would make automation too costly. BT considered factors such as the frequency of test runs, lifespan of tests, and cost of automation vs. the cost of manual testing and cost of script maintenance.

Once BT had designed the framework, they began scripting with a proof of concept. A small number of tests were used as a proving ground to confirm BT's understanding of the tests, the complexity of the tests was as expected, the technical issues of using the tool with the application(s) were identified and resolved, and BT's estimates of the cost of automation were reasonable. This was also TAC's opportunity to convince the test teams (its customers) that, this time around, automation could work for them.

Ensuring the quality of scripts was very important. To achieve this BT implemented a three-stage review process. The scripts were firstly peer reviewed by a buddy in the automation team, then they were reviewed by one of the automation designers, and thirdly selected scripts were reviewed by an external automation expert.

Finally, BT had to address the question of ROI. Was it more cost-effective to continue with manual testing or was the cost of automation justified? BT started off by eliminating some of the common tasks, such as test case design, that would need to be done in either case and assessed the remaining tasks for effort and cost. After that, it became a fairly straightforward exercise to calculate the point at which the investment in automation began to pay a return. As it turned out, the key measure is the number of test cycles that are needed before the outlay is offset by the savings. Depending on the business functionality being tested, the average ROI point has tended to be somewhere between six months and a year. For the Test Automation Centre as a whole, the ROI point occurred at 16 months.

#### Unplanned benefits

In addition to the planned tests automated, BT also found additional benefits.

- The act of detailing tests sufficiently for automation identified errors and omissions in the tests.
- Scripting and reviewing identified bugs in the applications not spotted by manual testers
- BT used simple automated scripts to provide regular smoke tests. These are used to confirm that all the major components in complex test environments are up and running. BT has extended this and is now running a handful of these tests hourly in the live environment.
- BT has used automated scripts to cleanse data (also used by manual testers to save time).

#### Pitfalls to avoid and lessons learned

Companies that are considering automated testing on this scale should be ready to address some specific challenges. These are just a few of the major lessons learned by BT:

- Not underestimating the amount of time needed from test team SMEs to assist and guide the automators.
- Awareness that automation consumes resources (in terms of equipment, people and data) much faster than manual testing.
- Not expecting busy test managers to simply hand over whole groups of tests for automation. Tests should only be automated after assessment of suitability (e.g. using a risk-based testing approach). Companies can waste significant money and effort automating tests that will never provide ROI.

- The responsibility for testing should lie with the test team, whether tests are run manually or automatically.
- **Work together! Communicate!** These words should be the mantra. Without them, automated testing stands little chance of success.

### Conclusion

It is now just over 15 months since BT set out to establish an industrial-scale automated testing capability. The company has come a long way since the initial steps of building processes and procedures, teams and relationships. BT started small and gradually ramped up the size to handle an increasing workload. Today, BT has an automation centre in full production mode. To date BT has automated over **21,000** scripts ranging in complexity from 10 steps to 600 steps, and run over **240,000** script executions. The benefits are significant: for every test execution run of 100 test cases BT saves on average **35** hours of manual test effort.

Automation on this scale is not for the faint-hearted and it doesn't happen overnight. It requires a huge commitment in terms of investment and sponsorship, and may not yield an immediate return. But for companies that stick with it and really fight to make it work it can be very rewarding. In BT's case, automated testing is paying real dividends as part of the overall effort to improve customer satisfaction, reduce cycle times and get things right the first time. For BT, automated testing is a winner.

It's also important to note that BT's success with automated testing is only part of the story. To ensure that BT is delivering the experience that its customers desire, automated testing is complemented by rigorous operational testing. So even when the software that underlies a particular process is validated through automated testing, the entire process is tested in the "real" world. If, for example, the process in question is for customer orders, the TAC will send a script to an operational testing team who then tests the entire process, from the initial customer order through an actual truck roll.

For BT, automated testing is imperative due to the complexity and scale of the 21CN initiative and the required time to market. However, organisations with less complex requirements can also derive business benefit from automating their testing.

## ABSTRACTS AND BIOGRAPHIES

### Opening Keynote Speaker:

#### **Thorkil Sonne, Specialisterne**

Thorkil Sonne is founder and CEO of Specialisterne and was formerly CTO of a company in the telecommunications sector in Denmark. When Thorkil's son was diagnosed with autism, he started the first company in the world, SPECIALISTERNE, where people with autism are given the understanding and support needed to perform highly specialist tasks for the business sector on market terms. SPECIALISTERNE executes tests for large International and Danish IT companies and cooperates with test consultancy companies in Denmark. Thorkil's keynote presentation at EuroSTAR 2006 was elected 'Best Keynote' and he will present a paper at StarWEST 2008. Thorkil has presented papers at test conferences in Sweden, The Netherlands and Scotland. Specialisterne was awarded 'Best Large Social Firm 2006' by CEFEC (European Association of Social Firms).

#### **Abstract: Special testing skills of a person with ASD**

SPECIALISTERNE is a Danish company that employs people with Autistic Spectrum Disorder (ASD) to perform complex and difficult tasks like software testing. It has been a tremendous success in Denmark and the company is now planning to establish offices in the UK with an ambition to create 500 jobs for people with ASD over the next 5 to 10 years.

Traditionally society has seen people with ASD in a negative context and yet their ability to concentrate, stick at the task and quickly absorb highly complex technical information are exactly the sort of characteristics required of software testers.

Will this be a threat or an opportunity to the existing players in the software testing markets around the world? Judge for yourself as you listen to this informative and moving keynote address by the founder of SPECIALISTERNE, Thorkil Sonne. His son has ASD and was the inspiration behind the project. Hear Thorkil's vision and strategy on how he believes the software testing industry will derive considerable benefit from cooperating with the SPECIALISTERNE concept in the UK.

#### **Workshop A1: Exploring the benefits of ASD resources**

With the world-wide skills shortages in software testing prevalent in everyone's mind, this workshop asks could we not try and make more use of an as yet untapped resource in the UK – the large pool of people diagnosed with ASD (Autistic Spectrum Disorder). You will be introduced to the very special skills that a person with ASD has and should slowly begin to understand how to manage these people to get the best out of them and help them have a rewarding and worthwhile career in software testing.

This is an opportunity to engage in a discussion with the founder of SPECIALISTERNE, Thorkil Sonne, and provide your input on how the UK software testing industry can get the maximum benefit out of the special resources that will be made available through his company in the UK.

A collaborative approach is sought whereby we can all work together to benefit the needs in the software testing industry. The workshop aims to identify the potential opportunities, explain the particular strengths of the proposed resourcing approach but also look into some of the weaknesses of the model and perhaps discuss how these might be addressed.

## **Mark Harman of Computer Science, King's College, London**

Mark Harman is head of Software Engineering at the Department of Computer Science, King's College, London. He is widely known for his work on program slicing, transformation and testing and more recently he was instrumental in the founding of the field of search-based software engineering. He is also the director of the CREST - the Centre for Research on Evolution, Search and Testing at King's, which is home to 15 research staff. More details at <http://crest.dcs.kcl.ac.uk/>

### **Abstract: Making Regression Testing Cheaper: Sorting out the Best Tests from the Rest**

Regression testing is becoming too expensive. The use of capture-replay tools and the result of many organisations "getting their house in order" with test data capture has led to a new regression test problem: we simply have far too many test cases, so we cannot follow the once-standard, retest everything strategy. This raises the question:

How can we select a subset from our large pool of regression test cases that minimizes testing effort while maximizing test effectiveness?

This talk will present the results of recent research at King's College London by Mark Harman and Shin Yoo that addresses this question. It will show how the selection of good test subsets can be automated, how multiple, conflicting and competing, test effectiveness measures can be accommodated and how we can address the problem of test case wear out in regression testing.

## **Hardeep Sharma, Citrix Systems**

Hardeep Sharma has been a professional software tester for over a decade and in various roles in the software and electronics industry and academia, from programmer to embedded-systems designer, for well over 20 years. Hardeep is currently Test Architect at Citrix Systems, where he helps develop and maintain effective testing strategies for many of the products developed there. Hardeep has interests in development/test metrics, including predictive analysis, cross-product compatibility in enterprise environments and both behaviour-based and traditional model-based testing.

### **Abstract: Increasing Test effectiveness using Graphical Test Planning**

Graphical Test Planning is an objective test planning and modelling methodology that wraps two layers of abstraction around the traditional Test Plan. It uses a technique for graphically defining what you intend to, and not to, test through the use of simple relationships. The first abstract layer separates the product design documents and Test Plan, becoming a tool that aids in early testing through requirements analysis, estimation, planning, test design, coverage analysis, test execution tracking and status reporting. The second abstract layer separates the Test Plan and the Test Suite which leads to reduced effort when automating, porting, maintaining or updating test plans and test cases.

## Declan Kavanagh, Insight Test Services

Declan Kavanagh is managing director of Insight Test Services. He has 28 years experience in IT, and has held hardware test engineering, test/quality management positions up to CEO level in US multinationals and SMEs. He has set up Software Development and Software Test business units providing services across Europe and the USA. He founded Insight Test Services in 2003.

## Workshop M1: Preparing a business case and a plan for investment in Test

This workshop will in effect take participants through a complete test business planning cycle from defining the current situation to preparing a plan for the target situation. The target situation being identified as “visible enhanced value perception (and reality) from the organisational investment in testing”. The style will be interactive with Tutor led presentation; Template based individual and group work, and group discussion.

Business Phase	Using Tools & Techniques
Understanding of Environment	Porters 5 Forces Model, Value Chain Analysis, Core Competence Analysis.
Clarity of Customer Needs	Expectation setting and Management. Service Level Agreements (SLA)
Value Proposition identified	Value Proposition Template
Core Competence Evaluation	Planning and Managing Core Competencies
Strategic Options & Competition	SWOT & Force Field analysis
Vision , Mission & Goals	Team method workshop
Strategies & Objectives	Business link model & KPI template
Roles & Relationships	Stakeholder Satisfaction management
Business Plan & Cases	Template & workshop
Performance Management	Process

## Sam Clarke, nFocus

**Sam Clarke** has 40 years experience in IT. He specialises in all aspects of IT related testing and has a proven record of defining, implementing and managing testing strategies for proprietary software development, banking, insurance, utilities, manufacturing, retail, and telecommunications. He uses his consulting experience to review and report on an organisation’s testing processes giving options for improvement where necessary. Sam is skilled in facilitation of workshops covering project definition, project risks, and test strategy, problem solving and quality improvement. Now a Principal Consultant at nFocus, his background includes consultancy and test management at IBM Global Services and IBM Product Development. He’s a popular and well known speaker having presented at several UK, European and international testing and quality conferences.

## **Workshop M2: The challenges and solutions of maintaining application reliability – if it's fixed don't break it!**

Does the high rate of business change compromise maintaining the reliability of IT business systems? Most IT professionals can relate to the unforeseen adverse effects of a change to an IT application, package or the underlying infrastructure. In addition there are sometimes unforeseen effects of changing an operational or business process.

Reliability of production applications and software products is now in jeopardy due to the increased pressure to support fast changing business environments. Traditional locked down processes that reduced the risk of adverse effects are being questioned and are often bypassed due to these pressures.

Sam will explore the challenges of maintaining the reliability of existing applications by focusing on regression testing. Then, during an interactive workshop, facilitate discussion to establish ways that the testing community can meet these challenges.

Provisional workshop topics will be:

- What are the critical reliability issues? How do you find and measure the cost?
- How can you measure the value of regression testing in terms of cost and benefit of maintaining reliability? Covering:
  - Improving confidence that reliability is maintained
  - Reducing the risk of failure due to change
  - Giving objective information of the state of reliability
- What are the critical success factors for realising the value of this type of testing? Covering:
  - Culture and process
  - Choosing the critical tests
  - Use of automated testing
  - Understanding constraints
  - Acceptance process
- What can we do tactically to improve the effectiveness of regression testing?
- What are the strategic solutions to enable effective and efficient regression testing?
- How can this testing be delivered?

A summary of the findings will be made available to the attendees.

## **Robert Sabourin, AmiBug.Com, Inc.**

Robert Sabourin has more than twenty-five years of management experience, leading teams of software development professionals. A well-respected member of the software engineering community, Robert has managed, trained, mentored, and coached hundreds of top professionals in the field. He frequently speaks at conferences and writes on software engineering, SQA, testing, management, and internationalization. The author of [I am a Bug!](#), the popular software testing children's book, Robert is an adjunct professor of Software Engineering at McGill University. Robert is president of the software engineering consultancy AmiBug.Com, Inc.

### **Abstract: Extreme Boundary Testing**

If you think you have explored the boundaries as part of your testing then this dynamic interactive presentation will open your eyes to some wonderful boundaries and great techniques to expose and explore them. The adventure begins with traditional boundaries, input fields, equivalence classes but then dives into the rich universe of boundaries related to systems behaviour, environments, system limits, design limitations and even eccentric user behaviours. This technical presentation opens your eyes to exploring the final frontier and understanding that beyond the confines of our knowledge there be dragons!

## **Fran O'Hara, Insight Test Services**

Fran O'Hara is (co)founder and practice director of Insight Test Services, providing test consulting, training and managed test services. He specialises in pragmatic approaches to process improvement and associated best practices. Fran is a regular speaker at process improvement and testing conferences. He is an ISEB/ISTQB tutor, a trained SEI CMM lead assessor and TickIT auditor, a fellow of the Irish Computer Society and co-founder of the Irish SIG in Software Testing - SoftTest.

### **Abstract: Effective Test Process Improvement**

Most process improvement initiatives fail. Using models like TPI, TMMi, CMMI to achieve process maturity ratings can deliver some benefit including marketing value but process as a goal in itself has a high risk of failure. However, real value comes from explicitly focusing process improvement and associated models to achieve measurable performance results for your business such as time and cost reductions and quality and productivity improvements. Many change approaches provide basic guidance but there is little specific support for how to actually link process improvement to business goals in a meaningful and measurable way. There is little support for rapid lightweight techniques to document your processes to ensure they are usable. This presentation will present a proven way to do process improvement that will get senior management commitment AND buy-in from project practitioners. It will provide proven solutions for the typical process improvement pitfalls such as:

- Lack of management commitment
- Unclear goals and poor images of success including no measurements
- Lack of buy-in from staff
- Over emphasis on process documentation
- Over emphasis on process assessments

## **Sue Atkins, io test and validation Ltd**

Sue Atkins, io test and validation Ltd, has extensive experience of testing methodologies and the use of CAST tools, including coverage of specific issues such as load/performance testing and usability design. Her experience includes performing high-level test planning consultancy and project management for projects both in the UK and the US. She has also written numerous articles on testing issues and presented at various testing conferences including EuroSTAR. She is a highly regarded test practitioner and trainer and current librarian to the SIGiST.

## **Book Review**

### **Balancing Agility and Discipline: A Guide for the Perplexed**

by Barry Boehm and Richard Turner

Agility and discipline: These apparently opposite attributes are, in fact, complementary values in software development. Plan-driven developers must also be agile; nimble developers must also be disciplined. The key to success is finding the right balance between the two, which will vary from project to project according to the circumstances and risks involved.

Balancing Agility and Discipline sweeps aside the rhetoric, drills down to the operational core concepts, and presents a constructive approach to defining a balanced software development strategy. The authors expose the bureaucracy and stagnation that mark discipline without agility, and liken agility without discipline to unbridled and fruitless enthusiasm. Using a day in the life of two development teams and groundbreaking case studies, they illustrate the differences and similarities between agile and plan-driven methods, and show that the best development strategies have ways to combine both attributes. Their analysis is both objective and grounded, leading finally to clear and practical guidance for all software professionals – showing how to locate the sweet spot on the agility-discipline continuum for any given project.

## **Closing Keynote Speaker:**

### **Marquis Harding, Microsoft**

Marquis Harding combines 21 years of experience in Testing, Quality Assurance, and Application Development with high-level management experience at dominant and innovative organizations such as Microsoft and Charles Schwab. Marquis is founder and chief executive officer of Reality Test<sup>®</sup>, a US based company specializing in load, performance and stress testing services. Currently Marquis is test manager in charge of Human Resources IT – Staffing for Microsoft; previously test manager for Microsoft Finance IT Reporting and Sales and Marketing IT system. Marquis was Senior Test Manager for Microsoft's Windows.com and Windows Update web sites. In addition, Marquis is a recognized international speaker at Testing and Quality Assurance forums.

## Abstract: Managing complex test environments

A test environment is for life, not just for Christmas!

Most testing projects come to grief more often than not due to poorly specified, incomplete, badly configured or simply just broken i.e. not working at all, test environments. This presentation will open your eyes as to the complexity of managing several test environments at Microsoft. Setting up a test environment is more than just building a server and “taking a copy of the live database”; you must consider all of the following components that make up a typical test or pre-production environment:

Component	Description
Hardware	e.g. Physical or virtual servers and disks, SANs (storage area networks), workstations, remote devices
Servers	What are the server functions (web server, database server, application server); what operating systems and related systems utilities and support tools are running on your servers
Database Software	This refers to the software components that run your preferred relational database management system (RDBMS)
Database	The raw, empty, unpopulated or part populated tables, files and other components necessary for your application to run
Test Data	Your choices are: Live copy, Live extract, Generated using a tool, or Manually input based on realistic business scenarios
Applications	The application under test and any other related applications required to make the test results meaningful
Processes	You'll need to develop clear processes and procedures to set up, refresh, update, control, recover, and decommission your test and pre-production environments for each project
People	You'll need skilled technicians and highly competent administrators to install, configure, control, maintain, own, and support your test environments.

It's vitally important to understand who needs an environment (e.g. developers, the test team, the business managers), for what purpose (e.g. unit test, system test, performance test user acceptance test – UAT), in what timeframe, how it is to be installed & configured, and eventually decommissioned.

Using examples from his experience as a senior test manager at Microsoft, Marquis Harding will help you to answer some of the more difficult questions about your own test environments such as:

- Do we always have to build a full scale production equivalent testing environment?
- For a performance test, is it feasible to reduce the test database to a more manageable size and then scale our results?
- How best can we book (reserve) our test environments for each project?
- What does a good scheduling process look like?
- What is the role of an environment manager?

- How much notice do project managers have to give the environment manager to request a new environment?
- How does new code get refreshed into the test environments?
- Where do we get our baseline test data from?
- How do we create test data?
- How do we keep the test database up to date?

There will also be an opportunity to ask your own specific questions about managing test environments.

## **Workshop A2: Benefits of formal inspections at Microsoft**

This workshop will help you to understand the value of using a formal software inspection technique and shows how you might jumpstart your own process to help find those bugs early in the Software Development Life Cycle (SDLC) and achieve business benefit far sooner than waiting until the system testing phase. By formal inspection we mean: having a defined procedure with entry and exit criteria, collection of metrics, and use of checklists. We expect inspectors to be fully trained, to take an outside perspective and to focus on present and future quality of the product.

Our figures show the dramatic differences in cost to find and fix the same defect. These range from just \$68 in the requirements phase, through \$1,000 in the stabilizing phase to \$12,000 in production! Some of our bug analysis data reveals that 33% of the bugs found were specification problems! Another survey found that the number of change requests reduced by 45% after implementing inspections within their team.

For those who feel that that software inspection only finds spelling and grammar errors one Microsoft project team discovered 1,117 severity 1 and 2 defects using formal inspections. The information gleaned is fed back into the training program in order to reduce the numbers of defects of those types in future releases.

We are also capturing outliers – expensive defects to illustrate the significance of late defect removal and change requests. We have one team that had a functional specification defect that totalled \$25,000 to find and fix, and are looking at a current project that has some “six figure” defects.