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THE **TESTER**

December 2008 Issue

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BCS

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

FROM THE EDITOR

Matt Archer, Editor

As you read this winter edition of *The Tester*, I will have been Editor for a little over a month. That leaves 4352 days before I reach Pam Frederiksen's record of 12 years! Pam's commitment to the SIGiST was outstanding. It's no surprise that under Pam's supervision *The Tester* was awarded the BCS Best Specialist Groups Magazine award and gained its exceptional reputation within the testing community.

What really makes me smile is that Pam is just one of thousands of people within the UK that are passionate about testing. If you share our passion then please join us at the next SIGiST conference on Tuesday the 19th of December, in London. Stephen Allott has organised another fantastic programme that I am certain you will enjoy, including two international keynote presentations from Bj Rollison – A Test Architect from Microsoft USA.

If you enjoy reading *The Tester*, then now is your chance to make it even better. I am currently sourcing articles for the spring edition of *The Tester* and I invite you all to contribute. If you have a testing story you would like to share, a test technique you would like to evangelise or testing research you would like to publish, then *The Tester* is the place to do it. If you're not sure whether your material is ready for a wider audience, feel free to email your work-in-progress or a brief abstract and we can work from there.

I look forward to seeing you all at the conference next month and wish you all a Merry Christmas and a Happy New Year.

Matt Archer

The Tester Editor
BCS Specialist Group in Software Testing
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WEBSITE LINKS

BCS SIGiST website: www.SIGiST.org.uk

SIGiST Standards Working Party: www.testingstandards.co.uk

SIGiST UML Testers Forum: www.umltesters.org

NEXT SIGIST CONFERENCE DATE

Tuesday 9th December 2008

BOOKING INSTRUCTIONS

If you would like to attend the December conference, please visit www.bcs.org/events/registration to access our online booking and payment system.

Alternatively if you wish to pay by cheque, a booking form can be downloaded from <http://www.bcs.org/upload/pdf/sigist-booking-form.pdf>.

If you have a query relating to your booking please contact Gemma Liddiard, Specialist Groups' Officer, Tel: (01793) 417656, Email: gemma.liddiard@hq.bcs.org.uk.

DATES FOR YOUR 2009 DIARY

When you get your Christmas diaries please make a note of our conferences for 2009 as attendance is on the increase and you must book early to secure your place.

2009 conference dates
Tuesday 17 th March 2009
Wednesday 17 th June 2009
Tuesday 22 nd September 2009
Thursday 10 th December 2009

TEST EDUCATION FOR FREE

Our SIGiST librarian, Sue Atkins, has kindly agreed to bring a selection of books from the SIGiST library to the December conference. For anyone attending, this presents an excellent opportunity to browse a range of testing books and identify any gaps in your testing knowledge. If you see something you like, you can take it away and read it in your own time – free of charge. The books will be displayed outside of the main hall.

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, Test Techniques and 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. Happy Reading!

PROGRAMME COMMENTARY: THE MULTI-SKILLED TESTER

Stephen Allott, Programme Secretary

The good tester develops skills for life, not just for Christmas. So before you break up for a well earned Christmas holiday I hope you are able to find time to enjoy our festive programme which has been designed to make you think about the skills you might need as a tester.

My experience as a consultant over this past year has been that as well as having to learn about ever more complex applications, test tools and techniques, testers are also finding they need to know a little more about the softer skills to help them do their jobs.

We kick-off the December conference with a potentially controversial talk on Exploratory Testing from Microsoft's engineering excellence leader, Bj Rollison. Matt Archer will then repeat his very well received talk from the SQC conference in October on test documentation and the legendary Dorothy Graham will explain the three critical Cs of testers (criticism, communication, and confidence). She's also offered to sing some festive carols during the morning break and after lunch.

Look out for our practical testing session in the morning workshop slot facilitated by Stewart Noakes and his team from TCL Group. If you want to try your hand at Exploratory Testing (ET) and maybe win a prize sign up early for this session as numbers are strictly limited to the first 25 participants.

After lunch, Geoff Thompson will use a real life case study to discuss the merits of test strategies and Stewart will provide some feedback and lessons learned from the testoff workshop.

We've two other great workshops in the afternoon, our slot for new and upcoming speakers (The Share Point) and a closing talk from Bj entitled "How We Test at Microsoft".

Please book early, especially if you want to attend a workshop and please get in touch with myself or my new deputy, Mo Shannon from BT, if you would like to speak in 2009. Look out for our call for papers for 2009.

I would like to wish you all a very Happy Christmas and a Prosperous New Year.

Stephen Allott

Programme Secretary
BCS Specialist Group in Software Testing
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Please don't delay – book today at www.SIGiST.org.uk

These one day events are becoming ever more popular. Attendance is up considerably on last year with 189 participating in the June conference. Please don't delay, book now to secure your place and avoid disappointment. The workshops sell out quickly and numbers are strictly limited to 12 or 25 participants depending on your choice. **Please note** (because people ask me every time) that the workshops run alongside some of the talks and so you cannot do both. You are testers so please read the specification carefully before you sign up.

NEXT CONFERENCE – PROGRAMME

BCS SIGiST – The Multi-Skilled Tester

Tuesday 9th December 2008

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

08:30	Coffee & Registration, Tools & Services Exhibition opens		
09:15	Introduction and Welcome Stuart Reid, SIGiST Chairman		
	Opening Keynote		
09:30	Exploratory Testing Exposed Bj Rollison, Microsoft, USA		
10:30	Networking session and commercial break		
10:45	Opportunity to visit the Tools & Services Exhibition and browse a selection of testing books from the SIGiST Library, during the tea/coffee break		
11:15	A thinking framework for context driven test documentation Matt Archer Ivar Jacobson International	Workshop M2 Testoff Stewart Noakes and team TCL Group	
12:00	The Tester's Three Critical Cs: Criticism, Communication, Confidence Dorothy Graham		
12:45	Opportunity to visit the Tools & Services Exhibition and browse a selection of testing books from the SIGiST Library, during the lunch break		
13:45	Christmas Testing Carols Dorothy Graham and friends		
14:00	Why bother with Test Strategies? Geoff Thompson Experimentus	Workshop A1 Soft Skills for Testers David Hornsby Independent	Workshop A2 Combinatorial Testing: Contextually the best practice! Bj Rollison Microsoft, USA
14:45	Results of the Testoff Stewart Noakes TCL Group		
15:15	Opportunity to visit the Tools & Services Exhibition and browse a selection of testing books from the SIGiST Library, during the tea/coffee break		
15:45	The Share Point, Colin Moore-Hill, RWE Systems Database Regression Testing - made easier with DbFit: a Next Generation Testing Tool		
	Closing Keynote		
16:00	How we test at Microsoft Bj Rollison, Microsoft, USA		
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.

ABSTRACTS AND BIOGRAPHIES

Opening Keynote: Exploratory Testing Exposed

Bj Rollison, Microsoft, USA

Exploratory testing as defined as "simultaneous learning, test design, and test execution" can be a powerful approach to testing in certain contexts. And, some testers continually promote exploratory testing (ET) as an approach that "finds important bugs fast" and "it can be orders of magnitude more productive than scripted testing." But, are these claims based on empirical evidence or emotional exaggeration? Since all approaches to testing are essentially exploratory in nature, the ET methodology as defined above is often contrasted with 'scripted testing' or the execution of test cases that are designed in advance and include finite steps to compare the actual result against an expected result. But, recent scientific research shows there is "no significant difference" in the number of defects found, or in the number of high severity type defects. A soon to be published study also concludes that prolonged ET does not significantly increase the probability of detecting additional defects within a given context. These studies are not suggesting that exploratory type testing is not a useful approach. In fact, because virtually all testing involves exploration it would be foolish to discount its value in the testing process. The effectiveness of ET and scripted tests is based on the skill, experience, and knowledge of the tester, and both approaches are effective in identifying different categories of issues. This talk dispels the unsubstantiated claims of ET based on scientific case studies, but also discusses how scripted test cases, exploratory type testing, and other approaches can be used in conjunction to more effectively test software and overcome the petulant pesticide paradox.

Bj Rollison is a Test Architect with Microsoft's Engineering Excellence group where he designs, develops, and teaches technical training to Microsoft's test and development engineers. He also provides consulting services on testing processes and adoption of best practices. Bj got his first computer in 1979 and taught himself Q-Basic, and started his professional career at a small OEM company in Japan in 1991 building custom solutions for small businesses. In 1994 he joined Microsoft and worked on several key projects including Windows 95 and Internet Explorer, and also served as the Director of Test responsible for managing the training programs for more than 6000 testers. Bj also teaches software testing courses at the University of Washington, sits on the advisory boards at the University of Washington and Lake Washington Technical College, and is co-author of "How We Test At Microsoft."

A Thinking Framework for Context Driven Test Documentation

Matt Archer, Ivar Jacobson International

Whenever the topic of documentation is discussed, it always reminds me of the story of Goldilocks and the Three Bears. In this story, a family of three bears live in a house in the woods. One day, the bears go for a walk, leaving their house unlocked. While they are out, Goldilocks enters the house and discovers three bowls of porridge. The bowls have been heated to each bears' specific taste so when Goldilocks samples the porridge she finds that the father's porridge is "too hot", the mother's porridge is "too cold", but the cub's porridge is "just right".

Many testers experience a similar problem when using other testers' documentation as a basis for their own, only to discover that it results in "too much" or "too little"

information and does not fulfil their own written communication needs. Goldilocks could easily move from one bowl of porridge to another, however, we aren't always so fortunate, regularly finding ourselves with documentation that has become out-of-date, yet is too sparse or too unwieldy to maintain.

Working with too much or too little test documentation can significantly reduce the productivity of any test team. As testing matures as a profession, so must our ability to reason about documentation and select an approach that complements our own specific context. Hence, this talk will share a thinking-framework for making decisions that allow us to spend just the right amount of time documenting and leave the maximum amount of time for finding bugs.

The talk will begin by discussing documentation from past projects to reveal the foundation of the framework - the fact that our written communication needs move along a scale from being light and agile to formal and disciplined, depending on our context. Many factors affect our context as testers, so the second part of the talk will focus on the factors that change our written communication needs (often in relation to increasing or decreasing our use of other communication channels) and how these factors can be used to reason about the level of detail and formality of our documentation.

***Matt Archer** is a Test Strategist for Ivar Jacobson International and a regular speaker at software engineering events. He has taken breaks from testing to work as a project manager, analyst and developer, but his true passion will always be finding bugs. He has been involved in all aspects of testing, from creating automated tests to running process improvement initiatives. More recently, he has focused his attention on model-based testing and testing within iterative development lifecycles.*

The Tester's Three Critical Cs: Criticism, Communication and Confidence

Dorothy Graham

Testers are professional critics - our job is to criticize other people's work. Although criticism can have a positive meaning, it is most often taken as negative. When we communicate our criticism to other people, we are sometimes misunderstood and this can lead to serious problems, including losing confidence in ourselves.

This talk will examine how criticism and communication can be improved, to make us more effective in testing without damaging relationships. This presentation includes a communication model that helps to explain how and why personal interactions can go wrong. The "push" and "pull" styles of influencing can help us communicate better with our managers. We will look at the effect of our own confidence and how this is related to criticism and communication. We end with some tips for increasing your confidence.

- how to give (and receive) criticism effectively
- understand how communication can go wrong and how to improve it
- how to increase your confidence to be more effective in your work

***Dorothy Graham** has been in testing for over 30 years, and is co-author of 3 books (Software Inspection, Software Test Automation and Foundations of Software Testing).*

Dot was the program chair for the first EuroSTAR Conference in 1993 and for the SIGIST for its first 7 years. She has been on the boards of conferences and publications in software testing. She was a founder member of the ISEB Software Testing Board and was a member of the working party that developed the ISTQB Foundation Syllabus.

She is a popular and entertaining speaker at conferences and seminars world-wide and holds the European Excellence Award in Software Testing.

Why bother with Test Strategies?

Geoff Thompson, Experimentus

The future of software testing depends on the approach taken by testers being more aligned with how projects are managed and not to effectively alienate themselves through their process. It is very important that we learn to be agile, and adapt to our context. This presentation will demonstrate the impact of a lack of agility, and too much dependence on the tried and tested methods we all are taught, and how the lessons learnt turned the project around and realized a significant and much needed success.

Many organizations are today adopting 'industry standard' methods for delivery. One such method is Prince2. This presentation will provide an insight into why railroading into a Prince2 environment the 'industry standard' test strategy to test case terminology does not always work.

The backbone of the presentation will be a real life case study where the presenter was responsible for implementing test process change into a Prince2 managed organisation, but it failed.

The project had a budget of £1m so you can imagine the panic that ensued when the first implementation was judged to have failed. We will look at why the implementation failed, and the actions that enabled success to be achieved.

Other examples taken from the presenter's experience of where intransigent testers have held projects to ransom over process will also be explored, in an attempt to understand why this happens. This part of the presentation we will explore the way that as individuals we learn to adapt to our environments and how that impacts our ability to change whilst testing.

There are some very agile testers working within our community today doing brilliant jobs today, however, the key to the future of software testing is for test community to work together to be seen to aid not hold back progress.

***Geoff Thompson** is the Consultancy Director for Experimentus Ltd, he has experience of test analysis through to test programme management, assessment and process improvement, as well as quality focused strategic organisational reorganisations. He helped to write the original ISEB (Information Systems Examining Board) Foundation syllabus and chaired the working party that created the ISEB Practitioner syllabus in 2002. Working with a small international team he helped create the ISTQB (International Software Testing Qualifications Board) and currently the UK Representative to the Board and the Chairman of the UK Testing Board (see www.uktb.org.uk). He was also a founder member of the TMMi Foundation (see www.tmmifoundation.org.uk), am Vice Chairman of the BCS SIGiST (Specialist Group in Software Testing) in the UK. He is also co-author of the biggest selling testing book on www.amazon.co.uk – ISEB – A Software Testing Foundation.*

Learning from the Testoff

Stewart Noakes, TCL Group

The evolution of testing and how we as testers practice our craft is helped by sessions where we review what we did, learn from others and find new ways of doing things. Building on the Testoff workshop run in the morning, this presentation will look at what went well, what went badly and where we can learn from some of the cool things people did when faced with these unique testing challenges.

***Stewart Noakes**, Chairman TCL Group Ltd (www.tcl-global.com), started in testing in 1996 and has been an engineer, coach, trainer, mentor and consultant for companies including: GEC Marconi CIS, X/Team & Transition Consulting Limited (TCL). Having founded TCL in February 2000, Stewart has developed testing enterprises in the UK, USA and India and has been at the forefront of the practice development at TCL. Academically, he is a visiting lecturer at the University of Bristol, Faculty of Engineering Management, and a guest speaker at the University of Exeter for a variety of Masters and Undergraduate degree courses.*

Database Regression Testing made easier with DbFit: a Next Generation testing Tool

The Share Point, Colin Moore-Hill, RWE Systems

I went to a SIGiST conference in September 2007 and heard the 'testobsessed.com', Elisabeth Hendrickson give a very passionate presentation called 'Test Automation: the next Generation' stating how development tools have become more powerful in the last several years with the advent of intellisense; keyword colouring; automated refactoring and tight integration with xUnit-style testing frameworks. While we've seen some huge leaps in development tools, the tools to support functional testing haven't kept pace.

One of the biggest steps forward in test automation which I am trying to include into my company's tool set are frameworks like FIT and Fitness that break down barriers between developers and testers or subject matter experts. While there is still a long way to go, and we're overdue for a major step forward in functional testing tools, I feel this is one such tool making moves in this direction is DbFit.

DbFit is a set of FIT fixtures which enables tests to be run directly against the Database, enabling database designers and developers to create and manipulate database objects in a relational tabular form, making testing and developing easier than xUnit style tools. Its main features are to allow regression testing of queries and SQL statements, functional testing for stored procedures and functions and to automate transaction controls and various short cut to make writing scripts easier and more efficient.

In this presentation I hope to show how easy it is to build up a set of regression tests in DbFit against an existing or new database.

Colin Moore-Hill MBCS, works within Corporate and Business Applications for RWE IT UK and is a graduate of the Galway Mayo Institute of Technology, with a lifelong quality professional. Currently he is working as a Lead Technical senior test Analyst. He works with a variety of technologies, business and project styles, from Retail to Generation and Renewables. He has also previously worked within rapidly-evolving internet start-ups and more traditional large-scale enterprises. He has both manual and automated systems testing experience with a special interest in the involvement of testing tools for testers.

Closing Keynote: How we test at Microsoft

Bj Rollison, Microsoft, USA

Microsoft ships a multitude of products in as many as 39 languages around the world. Many people are often curious as to how we do it and ask, "what process does Microsoft use to test its' software. The answer is difficult because there is no single process or approach to testing at Microsoft. This talk discusses our challenges as well as some of the common approaches and technologies used inside of Microsoft in its testing processes.

Bj Rollison is a Test Architect with Microsoft's Engineering Excellence group where he designs, develops, and teaches technical training to Microsoft's test and development engineers. He also provides consulting services on testing processes and adoption of best practices. Bj got his first computer in 1979 and taught himself Q-Basic, and started his professional career at a small OEM company in Japan in 1991 building custom solutions for small businesses. In 1994 he joined Microsoft and worked on several key projects including Windows 95 and Internet Explorer, and also served as the Director of Test responsible for managing the training programs for more than 6000 testers. Bj also teaches software testing courses at the University of Washington, sits on the advisory boards at the University of Washington and Lake Washington Technical College, and is co-author of "How We Test At Microsoft."

Morning Workshop M2: The Testoff

Facilitated by...

Stewart Noakes, Richard Morgan, Clare Batten and David Weston.

This Testoff is the perfect opportunity to show off your testing talents, share ideas and practices with others and have some fun doing it. Over the 90 minute session we will roll out a number of different environments, applications and gadgets for you to test in a competitive environment. Teams will be established on the day to tackle each of the testing challenges, and there will be contests for the most defects found, the best defects found and the most eccentric ('How did you ever find that?') defect.

You'll enjoy this session if you are a tester that likes to test stuff, if you are a great problem solver or if you like a challenge.

We'll give you everything you need on the day, but if you have any web tools or things you can bring on a USB key that help you with web testing that will be very useful for at least one of the items under test. You could also benefit from checking out blogs or podcasts on Exploratory Testing, Security Testing and Problem Solving.

Results from the Testoff will be presented in a special session in the afternoon where there will be an opportunity to learn from how people did things and take away useful hints and tips.

This is a practical session. Your hands will be on the keyboard! If you've never been to a Testoff before, then you can get a feel for what goes on at: <https://pest.tcl.eu.com/>

Afternoon Workshop A1: Soft skills for testers

David Hornsby, Independent Consultant

In this practical and very interactive session David Hornsby, an experienced life coach and NLP practitioner, will examine up to six different topics and themes that testers should consider adding to their soft skill set. Depending on the audience and their specific needs and requirements the depth of discussion and interaction for each topic will be tailored on the day.

(1) Managing Change or Transition

Change is often brought about by external forces or pressures and often against our wishes. How well do you cope with change? What strategies can you employ to help you, and others to embrace and enjoy the need to change?

(2) Effective Communication

Language is so much more than the words we use. Do you find that with some people it is easier to communicate than others? Want to find out why and discover the keys to effective communication? Learn the secrets of the great communicators, discover the language that is there for all to hear, but so few people hear it! Learn the skills for developing rapport, active listening and the messages you send though non-verbal communication.

(3) Goals and Values

How satisfied are you with your life at the moment? We tend to get used to what we have. We keep doing the same old things that we have always done and have always

worked. Our lives may be comfortable, but still there may be a nagging doubt: do I have everything I deserve right now?

(4) Beliefs: The rules of your life

Beliefs are the rules of your life, the rules you live by. These rules may be liberating and empowering and give you permission to get your goals and live your values. They may be obstructions, making goals impossible or leading you to believe you are not capable of getting them.

(5) Time Management

Do you feel the need to be more organised and/or more productive? Do you spend your day in a frenzy of activity and then wonder why you haven't accomplished much? Time management skills are so important in today's society when we are all being pressured to work harder and longer. This session will help you increase your productivity and stay cool and collected.

(6) Effective Persuasion - or - How to Get Your own Way with Integrity

Persuasion is a powerful force. We all rely heavily on our persuasive powers every day - whether it is trying to get people to agree with you, influencing others to make a decision, asking for something, or attempting to bring about changes of behaviour or attitude in others, your success depends on how persuasive you can be.

David Hornsby is a highly motivated, Professional Coach and Trainer. He has been coaching people all of his life in both personal and professional roles. A qualified Teacher and NLP Practitioner, with a Diploma Degree in Human Relations, David is also experienced in Business and Educational Management. In addition to personal coaching, David designs and runs group training programmes tailored to meet his clients' needs in all areas of Human Relations and Communication skills.

Afternoon Workshop A2: Combinatorial Testing: Contextually the best practice!

Bj Rollison, Microsoft, USA

Testing the interactions of complex input parameters with numerous possible variables is one of the most challenging problems we face as testers. And fault models predict that interaction between the variables of dependent parameters is a significant source of failures in complex systems.

Imagine you are assigned to test a feature with 20 parameters that are interdependent. There are 5 possible variable states for each parameter. The total number of possible combinations is greater than a half trillion; which means that at one test per millisecond it would take more than 3000 years to test all possible combinations. Which combinations do you test?

Pair-wise testing is a systematic procedure to effectively reduce the total number of tests by selecting a set of tests that evaluates each variable combination for each pair of parameters. Some people in the industry have suggested that pair-wise testing is not a 'best-practice' and provided several potential pitfalls. Unfortunately, those people failed to provide any alternative to the resolving problem of combinatorial testing, or any practical solutions to overcome the potential pitfalls.

This talk reiterates the identified potential pitfalls of combinatorial testing and provides pragmatic solutions to each potential pitfall using practical testing approaches and a freely available tool from Microsoft to overcome the difficulties sometimes encountered when applying this functional testing technique. This talk compares orthogonal arrays to coverage arrays, and then provides a detailed example of how to use a powerful, highly configurable combinatorial analysis tool to systematically test complex interdependent parameters.

Bj Rollison is a Test Architect with Microsoft's Engineering Excellence group where he designs, develops, and teaches technical training to Microsoft's test and development engineers. He also provides consulting services on testing processes and adoption of best practices. Bj got his first computer in 1979 and taught himself Q-Basic, and started his professional career at a small OEM company in Japan in 1991 building custom solutions for small businesses. In 1994 he joined Microsoft and worked on several key projects including Windows 95 and Internet Explorer, and also served as the Director of Test responsible for managing the training programs for more than 6000 testers. Bj also teaches software testing courses at the University of Washington, sits on the advisory boards at the University of Washington and Lake Washington Technical College, and is co-author of "How We Test At Microsoft."