



The independent software testing specialists

Welcome to IV&V Australia Testing Newsletter

This e-newsletter provides a practitioner's view of how to manage and perform SOFTWARE TESTING in today's world.

IN THIS ISSUE – August 2010

- 1. Testing in a Hurry.*
- 2. Upcoming Courses @ IV&V*
- 3. Alice's Adventures*
- 4. IV&V become an Implementation Partner for Odin Technology*
- 5. IV&V Australia participates in the AusMedTech 2010 conference*
- 6. IV&V Australia participates in the next ANZTB SIG*
- 7. Thought of the day*

Testing in a Hurry – Getting Your Priorities Straight

What do you do when you are assigned to do the testing on a project, and you realise that you don't have enough time to get the job done the way you think it should be done?

To start with, you need to take a cold, hard look at the tasks that you think should be done (if you had plenty of time) and how much time you think each one will realistically take. For each task (eg, a test to run, a document to write), consider the impact of either eliminating the task completely or cutting corners and doing it less thoroughly.

The key to making sensible decisions at a time like this is to understand both the priorities of the project and the risk of doing less testing. The answer to this will vary from project to project, and it is doubtful that you will ever make the absolutely correct decision (which will be proven with hindsight). But you have to start somewhere. You have to get your priorities straight. This tHints considers two time-saving techniques.

Streamline the Documentation Process

When time is running short, one of our first tendencies is to forget about planning and documenting tests, in favour of just "getting the job done". While this may feel faster, it is an inefficient way to work - you won't know how much of the system you have tested, and it is difficult to later repeat tests for regression purposes. Without some measure of coverage and repeatability, you cannot easily make judgments about the improving (or not) stability of the system. If you cannot make this judgment, what have you really achieved as a tester?

A better approach is to keep all test documentation tasks, but to streamline them. In particular, you can greatly reduce your documentation burden if you write detailed Test Cases with well-defined objectives and clear pass/fail criteria (consider using dot-points and tables rather than wordy paragraphs), but then free-play the test steps. By not laboriously writing keystroke-specific test steps, you will save the up-front documentation time plus you could save potential rework in rewriting test steps to keep up with user interface changes.

If you want to capture the detailed test actions (for re-testing/re-use purposes), you can log them during testing and update the document with the detail after the schedule panic has died down.

Concentrate Test Execution on Key Functionality

Despite our best attempts at planning, it is common for time to run out before we have run all of our planned tests or tested/retested all of the functionality. It is important to be realistic about this and work out a strategy for minimising the impact of a reduction in testing.

As one of your earliest test planning activities, work with the Business to identify the relative priorities of the functional areas and user scenarios. The Business should be responsible for this, however sometimes they don't do it. If this information does not already exist, talk with the developers, talk with the users, and talk with the managers, to gain a clear picture of what is most important about the system.

Some criteria for assessing functional priorities include:

- Mission criticality - without this function, the system might as well not exist.
- Cost and impact of failure – if this function fails, what will happen (how great will be the loss)?
- Scope of use - will this function be used often or only once in a while?
- Technical and interface complexity - defects tend to cluster in complex functions.
- User needs - is this function critical to the operation of the system from the user's perspective?
- Component history - how well do we trust this 3rd party software that we are using to achieve important goals? Where were the tricky bits on the previous version we released?

Use the criteria to classify your tests for each functional area and user scenario as either a High, Medium or Low priority test. The High priority areas (at least) are your key functionality tests, which should be run earliest, most often, and by the most experienced tester. These are the "must run" tests that you should never drop off when time is running short.

Every time you decide to reduce the amount of testing, ensure that you communicate this, and the resulting risk to the quality of the system, to all stakeholders. Remember that risk-based "Testing in a Hurry" is fine up to a point, and then the risk becomes too great and the result is a shambles.

Upcoming Courses @ IV&V

We have a range of courses of the coming months in the following locations:

Sydney

- End to End Software Testing: 1st - 2nd September 2010
- Introduction to Scripting: 21st October 2010
- Test and Governance: TBA

Canberra

- End to End Software Testing: 29th - 30th September 2010
- Introduction to Scripting: 26th October 2010

Melbourne

- End to End Software Testing: 13th - 14th October 2010

For more information on each of these courses feel free to contact us at info@ivvaust.com.au

What is included? All catering (arrival tea/coffee, lunch, morning/afternoon tea), course notes and interactive examples.

Alice's Adventures

Chapter 5 – Forming relationships between the teams

When we last saw tester Alice and developer Max, they were getting along extremely well and working towards a common goal. Their teams still seem sceptical, though - they still have residual doubts about each other. Old habits die hard, thought Alice.

The developers had traditionally viewed the testers as people who didn't understand the software and the testers had viewed the developers as a bunch of cowboys. Not that there is anything wrong with cowboys, but Alice didn't like it when there was a wild showdown as a result of differing views. Alice and Max had to head that off at the pass!

They got together over Tim Tams and coffee, and decided that a buddy system between developers and testers might work. They would link up the developer of a particular function with the tester! That way, as the software was being developed the tests would be developed at the same time. When the developer reviewed the tests, they would find out early on whether there were any mismatches in understanding of the requirements. Perfect!

One problem remained though - how to maintain the independence of the test team? What if the developer dominated the relationship, or the tester did, and then the product wasn't right? They decided that any mismatches in understanding would be logged in the defect tracking system and an independent party (like the system or product architect) would review the outcome of any agreed changes.

Alice and Max realised that views wouldn't change overnight, but they were confident that both of their teams wanted a great product and that cookies, co-operation and communication was going to get them a lot further than confrontation!

IV&V become an Implementation Partner for Odin Technology

IV&V Australia is now officially an implementation partner for Odin Technology Limited, helping our clients to achieve easier, rapid and results-oriented test automation outcomes with Odin's Axe code generator product and framework. The framework operates with HP, IBM, Microsoft and other test automation tools. For further information on how to get your tools productive, please contact info@ivvaust.com.au

IV&V Australia Participates in the AusMedTech 2010 Conference

Rodney Parkin, the Technical Director of IV&V Australia, recently participated in an AusMedTech 2010 Masterclass session with a presentation entitled: "**Medical Device Software – New Directives. The view of the test lab – approaches to software V&V and testing**". IEC 62304 is now effectively the minimum acceptable standard for software in medical devices.

The presentation was well received, and is available on <http://ausmedtech.com.au/program>

IV&V Australia participates in the next ANZTB SIG

Mark Feldman, a senior manager at IV&V Australia, will be presenting a session at the ANZTB SIG in Sydney on August 31st. This presentation is entitled "**What about test governance...? The case for the Test Centre of Excellence**".

Thought of the day

Testers don't make software; Testers make software better.

FEEDBACK

Have you found this issue useful? We want to hear your comments and suggestions. Email us at info@ivvaust.com.au.

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