TESTING IT: AN OFF-THE-SHELF SOFTWARE TESTING PROCESS,
2ND EDITION

*Testing IT* provides a complete, off-the-shelf software testing process framework for any testing practitioner who is looking to research, implement, roll out, adopt, and maintain a software testing process. It covers all aspects of testing for software developed or modified in-house, modified or extended legacy systems, and software developed by a third party. Software professionals can customize the framework to match the testing requirements of any organization, and six real-world testing case studies are provided to show how other organizations have done this. Packed with a series of real-world case studies, the book also provides a comprehensive set of downloadable testing document templates, proformas, and checklists to support the process of customizing. This new edition demonstrates the role and use of agile testing best practices and includes a specific agile case study.

*John Watkins* has more than thirty years of experience in the field of software development, with some twenty-five years in the field of software testing. During his career, John has been involved at all levels and phases of testing and has provided high-level test process consultancy, training, and mentoring to numerous blue chip companies.

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Simon is widely published internationally in conference proceedings, papers, and contributions to books and has presented as an invited speaker in the United States, at EuroStar, and at the World Congress for Software Quality.
TESTING IT


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To Francesca, Julie, and Valerie
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Foreword to the Second Edition

Geoff Thompson

So what is this testing thing then?

A question that I and many other aspiring software testing professionals get asked frequently. We try to explain, and watch the questioner’s eyes glaze over as he or she furtively starts looking around to find a reason to step away or change the subject.

Isn’t it strange that this happens? Is it that the explanation is simply incomprehensible by any sane person, or is it that software testers themselves need to understand in simple terms what it is they do?

I can add my own personal perspective on this issue; I help organize the British Computer Society Specialist Group in Software Testing (BCS SIGiST), and I am regularly surprised by two things: first, 70% of the attendees have never attended any form of networking meeting before, and second (and perhaps more important), none of the attendees read any of the many software testing books that exist.

Having had the opportunity to discuss this with many of the attendees, it is clear that the reason for this is the content of the typical testing book – it’s just too complex for them to get their teeth into and understand. What is needed is a straightforward, simple-to-read, and simple-to-use testing book.

When the first edition of *Testing IT* was released in 2001, this changed. For once there was a book that provided a simple overview of what testing was, with straightforward guidance for test practitioners, plus a selection of easy-to-use testing templates. Since then I have recommended *Testing IT* to numerous testers that I have met, as well as providing copies to the testers on projects I have managed, and have received positive feedback from them regarding the practical benefits that it provides.

With the publication of the second edition of *Testing IT*, John has built on the success of the first edition, revising and bringing it up to date to ensure it continues to be relevant for the next ten years and beyond. Having been a champion of the first edition, I was very pleased to have been invited to play a part in this process, having used my involvement in the Information Systems Examination Board (ISEB), International Software Testing Qualification Board (ISQTB), and the Test Maturity
Foreword to the Second Edition

Model Integrated (TMMi) initiatives to ensure the second edition continues to be relevant going forward.

So, back to my original question – what is this testing thing then? Well, although there is no single simple answer to this question, in my humble opinion, John’s book goes a long way to helping practitioners involved in test process, test management, and testing make a really good stab at answering the question for themselves.
Why is astronomy considered a science while astrology is considered only a pseudo-science? In other words, how can we prove that a theory faithfully describes reality, and that this theory can then be used to predict unknown facts? Karl Popper, the well-known philosopher, studied these problems and summarized his conclusions in one phrase: “The criterion of the scientific status of a theory is its falsability, or refutability, or testability.” For Popper, “confirming evidence should not count except when it is the result of a genuine test of the theory.”

The testing process of a scientific theory is quite similar to the process of providing confirmation either to risky predictions or to attempts to falsify that theory. Testing is a complex activity. It has to simultaneously bear in mind the theory and the external reality; it has to provide objective answers to complex questions related to our own perceptions of a rational reality.

When developing software, we follow the same thought process, since one builds an abstract model between the external world and the user. In our software, we define strict processes that will guide our actions, and we build the data we want to manipulate in complex databases and templates.

Can we test our software with Popper’s principles in mind? The answer is definitively yes, because software testing should not only be a confirmation that the application is working correctly but also that it will react correctly when unexpected conditions occur. This constant and complex relationship between the software one tests and external reality should guide testers in their daily work.

Although testing is usually perceived as a necessity in software development, it is rarely applied as a rigorous activity. Within many projects, testing is simply omitted; in others, it is executed with the distinct intent to prove that the application performs correctly under test conditions.

After reading John Watkins’s Testing IT you will be convinced that testing is not as complex as it seems and that it can be managed like any other development activity.

Foreword to the First Edition

The first thing you notice in reading *Testing IT* is that John puts the accent on testing processes and real-world case studies, which are, in my opinion, the most important aspects of software testing, implicitly applying Popper’s conclusions.

*Testing IT* is divided into three logical, distinct parts: Part 1 focuses on traditional testing processes. Although technology is evolving at lightening speed, processes remain. They become even more important because they are at the heart of any activity. You will find this part very useful since it presents the testing phases starting from unit testing up to regression testing in the order found on all projects. Each phase is presented in the same coherent plan, facilitating access to the information.

Part 2 gives practical case studies. Five projects are reported, each enhancing a different reality; we have again the confirmation that success is always related to a correct adaptation of processes to reality.

Part 3 presents ready-to-use templates and reference documents that you can adapt to your needs and that you will find very useful in your daily testing work.

*Testing IT* is not just another book on testing. It is, in addition, a guide for all testers who want to understand what testing is really about, and it proves once more that applying easy-to-understand processes is the key to success. In one word: indispensable.

I’m certain you will enjoy reading this book, as I did, and that you will keep it on your desk to profit in your daily work from John’s rich experience.

Maurice Rozenberg, Paris
Author of *Test Logiciel* (1998, Eyrolles)
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