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**Making  
testing  
more  
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Including articles by:

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## Test documentation: getting the best from the people who matter most

by Rachael Wettach and Paul Malcolm

The wide variation in test documentation and the risk caused by poor examples is unacceptable. Testers need to work harder on standardizing our most fundamental tool and technique



**Rachael Wettach and Paul Malcolm** share some of Simpl's templates and the help in using them it provides to its clients

**Effective, accurate project** and test documentation may not be fashionable in development-led environments such as commercial software houses and web-only ventures, but for testers with wider and greater responsibilities it's still essential. It plays an important role in defining responsibilities at every level; it is the most formal, visible and auditable means of communication between all involved; most importantly, it is the fabric and fuel of the best and most effective test technique of them all – the review.

Every organization can benefit from improving its documentation procedures, and testing as an industry could be transformed by creating greater commonality of structure and content of the fundamental elements. Templates in standards such as IEEE 829 and examples in books are useful but neither tells one explicitly enough how to actually go about compiling and

writing the necessary information, especially in the hardest, early stages. Interpretation and implementation vary widely even between experienced, dedicated testers, and they need input from others such as subject matter experts who cannot be expected to have or gain expert knowledge of how what they provide will be used and the implications if it is incomplete or inaccurate. This variation creates problems, risks and inefficiencies when teams and organizations collaborate.

So when we at Simpl work towards effective business solutions with our client organizations in the UK's National Health Service and private healthcare, we offer them not just templates but guidance on how to complete them – a recipe for a more complete, higher-quality first draft which will make the review process faster and even more effective at reducing risk. Below are some sections excerpted from two of the templates, including that guidance. All the templates carry the usual configuration management elements including history of change, distribution lists and sign-off, and require that every paragraph is numbered for traceability, but we have omitted all this information here to make the guidance text more readable.

We do not say that the templates represent the right or best way to build test documentation, but suggest that as well as being a useful way to assist and capture information from external testers and other project participants, verbose, explicit description of this kind as opposed to sparse templates and frameworks that try to be very general may be a route towards wider standardization of test documentation and all the advantages that might bring.

## How to read the templates

{Text in curly brackets} is guidance on how to complete the document. It should be deleted before use or delivery.

*Italic text* is part of the document and should remain, but can be edited according to the guidance.

Underlined **HEADINGS** and Subheadings must remain in the document unchanged.

## Excerpts from the test strategy template

### INTRODUCTION

#### Project background

{Identify and describe briefly the project. Include enough information to distinguish it from any similar or related projects including its start date, any external participants (customers and partners) and any known alternative titles for or references to it used by others}

#### Document purpose

*The purpose of this document is to:*

- *define the testing process to be carried out*
- *explain the overall approach to testing to be used*
- *describe how separate parts of the testing effort are to be integrated*
- *describe in overview the strategy for progressing from one test phase to the next*
- *describe in overview the strategy for progressing from the final test phase to delivery*

{Delete any that do not apply and add any special purposes that apply to this specific project}

#### Related documents

*The following documents were referred to in the preparation of this test strategy.*

{Identify all relevant documents and other sources including their configuration management information and, where applicable, from where they were

obtained. Include also the date ranges on which they were used in case of CM failure}

#### Glossary

*All test documentation for this project is to use the following definitions of terms.*

{Define any terms used that you believe any reader may not know or may misunderstand, paying particular attention to acronyms, abbreviations, IT components, test phases, test types}

### TEST RISKS/ASSUMPTIONS

#### Project-related risks

{State how project risks have been identified and where they have been documented}

*As the project proceeds further risks may be identified and documented. In that case, this test strategy may need to be modified to maintain alignment with identified risks.*

{State how the risk information will be used by testing}

*Information about project risks will be used to:*

- *decide the areas on which testing will focus*
- *quantify the testing effort required by each area*
- *prioritize testing activities accordingly*

{Add any additional uses/influences of the risk information applying to this specific project}

#### Test-related risks

*The following high-level test-related risks have been identified.*

{List all the identified risks that could impact effectiveness or timely completion of testing. For each, detail the possible undesirable event, envisaged consequences if it occurs, and any action you can suggest that might mitigate it}

#### Assumptions

*The following assumptions have been made in preparing this test strategy and if they are found not to hold the strategy may need to be modified.*

{List all assumptions made, whether or not you believe they are safe. There is no need to justify them}

### TEST OVERVIEW

#### Overall approach

{Relate what has been decided about the approach(es) to be taken to testing, with particular attention to anything distinctive about this specific project}

{If there is to be more than one test plan document, list them all}

{If the test effort is to be divided into time periods, list them and what is intended to be achieved during each. Identify also any apparent overlaps or gaps}

{If the test effort is to be divided by entity or team, list them and what is intended to be achieved during each. Identify also any apparent overlaps or gaps}

#### In scope

*The following are to be tested and are covered by this test strategy.*

{List the areas and features of the product that are to be tested}

#### Out of scope

*The following are not to be tested and are not covered by this test strategy.*

{List areas and features of the product that are not to be tested}

{List connected or related systems, peripherals and interfaces that are not to be tested}

{List any types of testing or product characteristics not covered by this test strategy}

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## TEST STRATEGY

### Test phases

*The testing project will be divided into the following test phases:*

- *unit*
- *component integration*
- *system*
- *system integration*
- *user acceptance*
- *operational acceptance*

{Delete any that are not to be done, add any others that are, and substitute alternative locally-used names where appropriate. Define what each additional or renamed phase is intended to achieve in the glossary}

### Entry and exit criteria

{For each test phase, list the events that must be shown to have taken place before the activities it includes can be started, in this format:}

*At or before the commencement of {insert test phase, eg unit testing} the following events must take place and be documented and approved:*

{Always include detail of:

- review and approval of relevant project documents
- prerequisites including resources, test environments, test data, tools and technical support
- definition and approval of an issue management process

then add any additional entry criteria applying to this specific project, for example external approvals, auditing etc}

{Now for each test phase except the last, list the events that must be shown to have taken place before the activities it includes can be ceased, in this format:}

*At or before the end of {insert test phase} the following events must take place and be documented and approved:*

{Always include detail of proportions or numbers of test cases not passed, outstanding issues and unmitigated project risks, all broken down by priority. Then add any additional entry criteria applying to this specific project, for example external approvals, auditing etc}

{For the final test phase, list the events that must be shown to have taken place before final delivery}

### Test types

*The testing project will include the following test types:*

- *functional*
- *functional (GUI)*
- *regression*
- *load*
- *stress*
- *infrastructure*
- *connectivity*
- *disaster recovery*
- *failover*
- *backup/restore*
- *security*
- *contract acceptance*

{Delete any that are not to be done, add any others that are, and substitute alternative locally-used names where appropriate. Define what each additional or renamed type is intended to achieve in the glossary}

{Then for each test type append the test phases which will include it. For example:

- *functional* – in all test phases
- *load* – in system and system integration

If you are not sure whether a phase will need to include a test type, assume it will}

## TEST MANAGEMENT

### Test deliverables

*Before or at its completion the testing project will deliver the following documents:*

{List all documents currently planned to be delivered. Include always:

- the test plan for each of the test phases identified in the previous section
- the test summary report for each of the test phases identified in the previous section
- the test issue report for each of the test phases identified in the previous section
- specification of the test material, ie test cases, scripts and data. This may form a separate document for some or all of the test phases, or one document may contain material for more than one phase
- a vehicle to provide traceability between all project requirements, risks, test cases and issues
- a final test summary report covering all test phases}

### **Excerpts from the test summary report template**

## INTRODUCTION

### Test phase background

{Identify the project and the test phase reported. Reference the test strategy for the project. State the actual start date of this phase, the start and end date of the period being reported and the actual end date of the phase if it is complete}

### Document purpose

*The purpose of this document is to:*

- *communicate the findings of testing*
- *summarize the results of testing*
- *provide auditability*

{Add any special purposes applying to this specific project}

## TEST OVERVIEW

### Test progress

{Assess briefly the progress of the activities planned for this phase including test analysis, design, specification and execution, (a) during and (b) up to the end of the period reported. State the current projected date for the end of this phase}

### Major issues

{Describe briefly all test issues that have occurred in the period reported and that

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have affected or may affect test progress.  
For each, quote its issue management  
system reference}

### Exit criteria

{State the exit criteria for the phase as  
defined in the test strategy}

{If this is not the first test summary report  
produced in the project, reference the  
previous one and detail any changes to  
the exit criteria made since the end of its  
reporting period, with brief explanation of  
why they were deemed necessary}

{State whether or not the current exit  
criteria have been met during the period  
reported}

### Scope

{If this is the first test summary report  
produced in the project, reference the test  
strategy and detail any changes to the  
items in scope made up to the end of the  
period reported; or, if this is not the first  
test summary report produced in the  
project, reference the previous one and  
detail any changes to the items in scope  
made since the end of its reporting period,  
with brief explanation of why they were  
deemed necessary}

### Risks identified

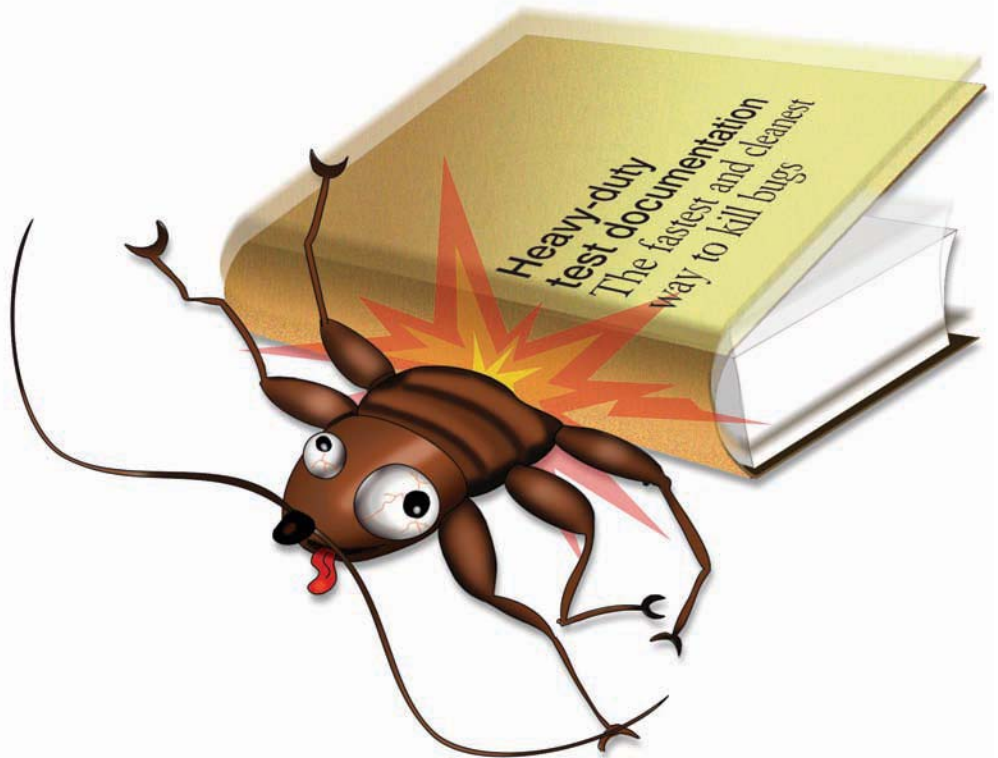
{List any new risks identified in the period  
reported. For each, detail the possible  
undesirable event, envisaged  
consequences if it occurs, and any action  
you can suggest that might mitigate it}

## TEST RESULTS

### Test execution progress

{State the number of test cases and/or  
scripts intended to be executed during this  
phase (i) not yet ready for execution; (ii) of  
which execution has not yet been  
attempted; (iii) of which execution has  
been attempted but was not completed  
successfully}

{State the number of test cases and/or



scripts executed successfully within this  
phase, (a) during and (b) up to the end of  
the period reported}

### Issues

{State the number of issues currently  
open, broken down by criticality as defined  
in the issue management system used for  
this phase}

{State the number of issues (i) raised; (ii)  
retested and closed, (a) during and (b) up  
to the end of the period reported} ■

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