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www.business-analysis.com.au

If you have any questions regarding the information in this document or suggestions for improving the document, please forward details to Business Analysis (BAPL) at the following contact point:

Email: <u>info@business-analysis.com.au</u>

Phone: 1300 33 11 64

### **Version History**

Website:

Version	Date	Nature of Amendment	Changed By

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### **Template Usage Guidelines**

The text mentioned below is to be used as a reference guide while completing this document. Remove this section/page after completing/before-publishing this document.

- a) The dark blue text represents help/instructional text in the template please remove it from the final version and/or before publishing the document.
- b) This template is designed to capture Test Strategy information only.
- c) Please do not remove any section(s) from this document unless otherwise specified.
- d) Please do not leave any section blank.
- e) Please ensure not to describe any System Design element(s) in this document.
- f) Do not forget to update the table of contents figures and caption tables (Reference tab in MSWord) once the document is complete.
- g) Introduce naming conventions as required for traceability purposes.

### 1. Introduction

Provide a brief introduction to the product or service offering. Consider including product history, reasons for introduction or changes, expected outcome of the changes, who might use it and the benefits of them using the new or enhanced product.

### 1.1. Purpose

State the purpose of the Test Strategy. Include reference to the key objectives, the scope of the testing, and any key timeframes.

I.e. The purpose of this Test Strategy is to define the overall approach that will be taken by the Test Team when delivering testing services to all of the projects within the business.

### 1.2. Glossary of Terms

Add the Glossary for definitions of company/project specific terminology.



### 2. Test Items

State how the Test Items will be generated.

I.e. For each Release the Test Engineer will create a table of Test Items that will be in scope of the testing being planned. These will be identified from the Scope Items in a given Release and include interrelated modules and components of the service that will be affected by the Scope Items.

In addition, the Test Engineer will record any Test Items that cannot be tested by the test team. The Test Plan will contain Test Items that are In-Scope and Out-of-Scope.

### 2.1. Features to be tested

The Test Engineer will record all of the features to be tested for each of the Test Items in scope.

The Test Breakdowns will include details of the Test Scenarios from which the Test Cases will be derived.

### 2.2. Features not to be tested

The Test Engineer will record all of the features that will not be tested in the testing phase for which the strategy is written



# 3. Testing Approach

- < Narrative description of the high-level Strategy>
- <A description of the test methodology that will be followed>
- <Include a diagram where possible V-Model, Scrum, Waterfall see example below>

<Touch on risks, discuss the use of test equipment or data, etc. – use this paragraph to tone-down the formality of the rest of the document and set the scene for the rest of the plan, look to add value for the audience in the approach and their support of it. Touch on anything that has no clear area for inclusion in the Test Plan>

Example diagram - Software Testing Lifecycle

#### Software Testing Cycle Business-level Requirements through Requirement Understanding Project Documents, Client Interaction Analysis Requirements System-level Requirements Phase through CRS and SRS Test Strategy Test Plan and Test Methodologies Test Planning Test Environment Readiness Review Planning and Development Test Procedures Test Definition / Test Scenarios Phase Development Test Cases Test Scripts Functional / Module Testing Test Execution Implementation Regression Testing (Manual / Automated) System Testing Phase Performance Testing Test Summary **Delivery Phase** Test Reports Test Reporting Test Metrics Client Sign-off Sign-off Phase Project Sign-off Project Closure Report

https://www.360logica.com/software\_testing\_cycle\_small/

## 3.1. Entry Criteria

Before Test Items are made available for the Test Team to test it's expected that:



- All test tools and test infrastructure are available for use during testing
- All Test Items are development complete
- The correct versions of the code have been deployed to the correct test environments
- Sanity and Unit tests have been completed successfully to demonstrate readiness for test

\*Note – It should be tailored as per the project needs.

### 3.2. Exit Criteria

For the Test Items to exit testing the following conditions will have to be met:

- The Test Summary Report will be completed.
- All planned testing activities has been completed to agreed levels.
- All high priority bugs have been fixed, retested and passed.
- No defects must be left in an open unresolved status.

\*Note – It should be tailored as per the project needs.

### 3.3. Measures and Metrices

At the Initiation Phase of the project the Test Team will publish a set of measures and metrics related to the test activities of their Planning & Analysis and Execution phases. The Test Plan also defines the milestone dates for key deliverables such as the Test Plan and these are metrics captured for ongoing statistical process analysis across successive projects.

Examples of metrices are mentioned below:

#### **Test Preparation**

Number of Test Scenarios v. Number of Test Cases Number of Test Cases Planned v. Ready for Execution Total time spent on Preparation v. Planned time

### **Test Execution and Progress**

Number of Tests Cases Executed v. Test Cases Planned Number of Test Cases Passed, Failed and Blocked Total Number of Test Cases Passed by Test Item / Test Requirements Total Time Spent on Execution vs Planned Time

### **Bug Analysis**

Total Number of Bugs Raised and Closed per Test Run Total Number of Bugs Closed v. Total Number of Bugs Re-Opened Bug Distribution Totals by Severity per Test Run Bug Distribution Totals by Test Item by Severity per Test Run



# 4. Pass/Fail Criteria

Each Test Item will be assigned a Pass or Fail state dependant on two criteria:

- Total number and severity of Bugs in an Open & Unresolved state within Bug Tracker tool.
- The level of successfully executed test requirements.

The Test Item can be declared as "Test Complete" when the combination of both criteria has been successful. However as this is a minimum level of quality, it's recommended that where project timescales allow, further testing and development should be conducted to raise the overall quality level.

### Table of Issue Severity

Severity	Definition	Maximum Allowable
<i>S1</i>	Crash/Legal – System crash, data loss, no workaround, legal, Ship Killer	0
<i>S2</i>	Major – Operational error, wrong result	<set by="" pm=""></set>
53	Minor – Minor problems	<set by="" pm=""></set>
54	Incidental – Cosmetic problems	<set by="" pm=""></set>
<i>S5</i>	N/A - Not Applicable; used for feature requests and Development Tasks	Reference Only

The total MAXIMUM number of issues recorded in Bug Tracker, that can remain in an Open & Unresolved state for the Test Item and be acceptable for release.

### Table of Test Scenario Priority

Test Scenario	Definition	Minimum Pass Rate
P1 – Critical	Essential to the Product	100%
P2 – Important	Necessary to the Product	<set by="" pm=""></set>
P3 – Desirable	Preferred, but not essential to the Product	<set by="" pm=""></set>

The MINIMUM set of Test Scenarios that must pass before the Test Item can be considered for release.

Unforeseen issues arising during the Test Phase may impact the agreed 'Pass/Fail' Criteria for the Test Item. Issues can be managed through review with the Test Team and the project authorities.



## 5. Suspension Criteria and Resumption Requirements

Testing of Test Items will be suspended if:

### 1a) Suspension criteria:

A Severity 1 issue is logged and requires fixing before further testing can take place (a Blocking Issue)

### 1b) Resumption requirement:

The issue will need to be fixed before the Test Item is returned to the Test Team for testing.

### 2a) Suspension criteria:

Significant differences exist between observed behaviour of the Test Item and that is shown in Test Scenario, Test Case or as expected from the previous version of the technology.

### 2b) Resumption requirement:

Development, the Test Team and PM must come to a conclusion on resolving the issue and agreeing a definition of the expected behaviour.

### 3a) Suspension criteria:

A Test Item sent for testing fails more than 20% of Developer Unit Tests.

### 3b) Resumption requirement:

The Test Item must be fixed, or Unit Tests refactored if out of date and then demonstrated to pass with <20% failure rate.

\*Note – Above mentioned criteria are dependent on project to project.



### 6. Test Deliverables

The following artefacts will be produced during the testing phase:

#### • Test Plan

Used to prescribe the scope, approach, resources, and schedule of the testing activities. To identify the items being tested, the features to be tested, the testing tasks to be performed, the personnel responsible for each task, and the risks associated with this plan.

#### • Test Schedule

Which describes the tasks, time, sequence, duration and assigned staff.

#### • Test Breakdown

Which includes the Test Scenarios, their priority and related number of Test Cases along with the defined estimates for time to write and execute the Test Cases.

#### Test Cases

Detail the pre-conditions, test steps and expected and actual outcome of the tests. There will be positive and negative test cases.

- Periodic progress and metric update reports
- Bug Reporting
- Test Summary Report

<sup>\*</sup>Note - Test deliverables varies on project to project basis.



# 7. Test Types

Mention the testing types that are in scope of the project. For example,

- **Fully in Scope:** Functional and Regression Testing, Cross Browser Compatibility, Integration in the Large, Performance testing.
- **Out of Scope:** Automated Regression, all forms of Non-Functional, Accessibility Compliance Testing, Security Testing, User Documentation Review.



### 8. Environmental and Infrastructural Needs

Mention the environmental and infrastructure needs according to the project scope. Please refer the below example -

The following detail the environmental and infrastructure needs required for the testing of abc.com Test Items and execution of Regression Testing.

#### Hardware.

- Integration Environment:
- *Test-A: http://.....*
- Test-B: http://....
- Pre-live Staging:

#### **Software**

- <Name of Bug Tracking Tool>: http://...
- <Name of Test Case Management Tool>: http://
- <Name of Automation Tool>: http://

#### Infrastructure

Network connections are available on all Test Systems as required.

### **Test Repository**

http://...



# 9. Responsibility Matrix

Mention the resources responsible for delivering the various testing activities. Below is the sample responsibility matrix -

Activity	Product Manager	Development Manager	Test Manager	Test Engineer
Provision of Technical Documents	X	X		
Test Planning and Estimation			X	X
Review and Sign off Test Plan	X	X	X	
Testing Documentation			X	X
Test Preparation and Execution				X
Test Environment Set-up				X
Change Control of Test Environments			X	X
Provision of Unit Tested Test Items		X		
Bug fixes and return to the Test Team for re-test		X		
Product Change Control	X	X	X	
Ongoing Test Reporting			X	X
Test Summary Reporting			X	



### 10. Schedules and Resource Plans

#### Team Plan.

The Test Team will maintain a Team Plan which records individual assignment to testing tasks against assignable days. This will also record time planned and delivered against the tasks which will be used to update relevant Project Schedules and be used in periodic reporting.

### Test Schedule.

The Test Schedule for the Release will be located within <Document Store Name> at: http://



# 11. Risks and Contingencies

Mention the risks and contingencies related to the project. Refer the below table for an example:

	Risk	Mitigation Strategy	Impact
1	Delays in delivering completed Test Items from Development would impact test timescales and final Release quality	Product Management and Development to advise of any delays and adjust Release Scope of Resources to allow the test activities to be performed.	High
2	Delays in the turnaround time for fixing critical bugs, which would require retesting, could have an impact on the project dates.	Strong management of bug resolution would be required from Development to ensure bugs are fixed and available for re-testing in the scheduled time.	High
3	The Test Team, Development or PM teams require domain guidance from one or the other and they are not available. This would delay project activities.	The Test Team, Development and PM teams to ensure they are available at critical points or contactable during the project activities.	Medium
4	Features of Test Items will not be testable.	The Test Team will record untested features and request the PM to assess business risk in support of the release of untested features.	Low
5	Unexpected dependencies between Test Items and service components are encountered that require revision of Test Scenarios and related Test Cases.	Information about dependencies is updated and communicated promptly to allow timely revision of Test Scenarios and Test Cases	Low



# 12. Approvals

Document the resources for the approval of the document. Refer the below table for example:

Approval By	Approval
Test Manager	
The Test Department Manager	
Product Owner	
Development Manager	
Project Manager	