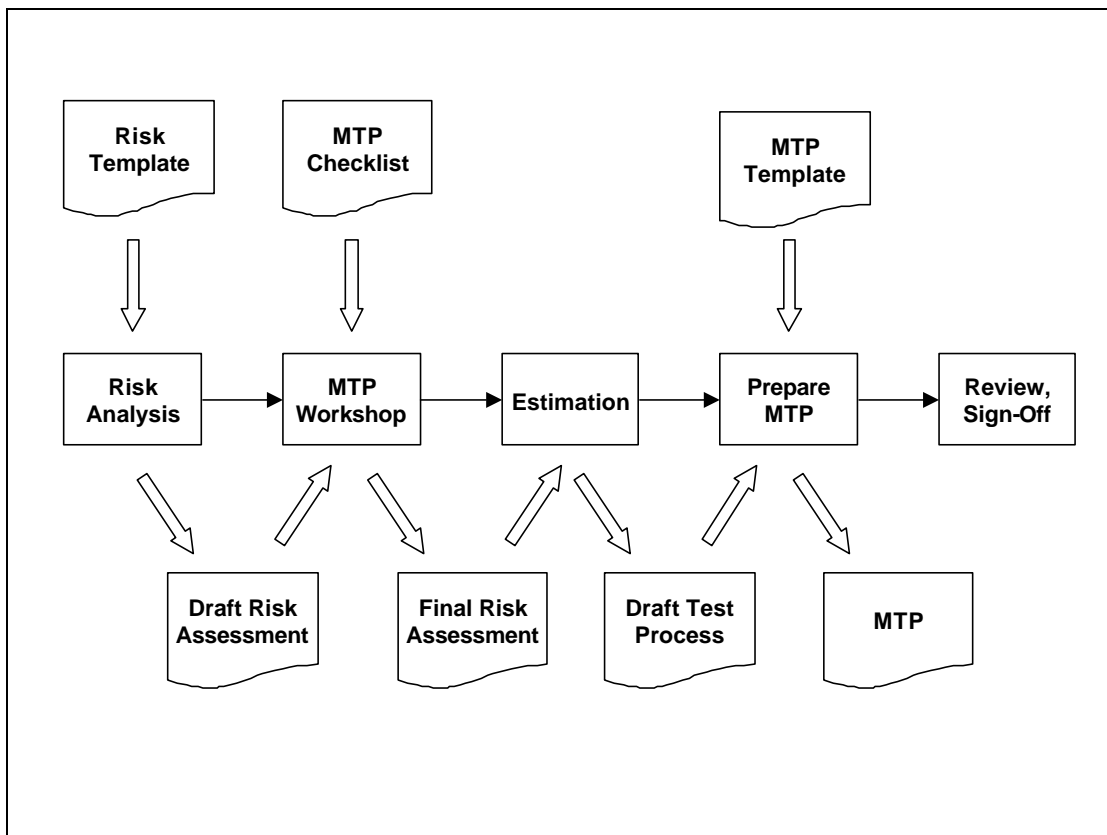


Sample Master Test Planning Process

Master Test Planning



Overview

Test planning starts by selecting the type of project. Essentially, the type of project determines the level of detail of test planning. Simple sites require the least test planning and the testing is likely to be largely based on checklists of common issues to be covered. The most complex projects may involve more detailed investigations into the technology to be used, interfaces to third parties, construction of more substantial and complex test environments and a substantial effort on the design, preparation and maintenance of test data.

Selection of the type of project is based on the knowledge and experience of the developers and testers and is based on size, complexity and novelty of the site under development.

Project Types

Project Type	Typical Characteristics
'Simple'	<ul style="list-style-type: none"> ▪ Brochureware, graphics, flash, static pages, feedback forms, JavaScript or VBScript on pages, and email functionality. ▪ Main concerns: HTML syntax, appearance of pages, link checking, browser compatibility, hardware and O/S compatibility, speed of page loading.
'Medium'	<ul style="list-style-type: none"> ▪ Characteristics of 'Simple' project plus the following: ▪ Back-end database (3-5 tables) maintained by the web pages; ▪ Links to functionality on other, external websites;

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	<ul style="list-style-type: none">▪ Exchange of data to/from other, external websites;▪ More complicated calculations;▪ Larger site size (>20 pages);▪ Main concerns: ability of web server to support projected load/traffic, accuracy of calculations, reliability of service, and usability of site.
Complex	<ul style="list-style-type: none">▪ Characteristics of 'Simple' and 'Medium' project plus the following:▪ Back-end database (>5 tables) maintained by the web pages;▪ Business transactions spanning multiple pages with functionality;▪ Interfaces to or redirection to functionality on other sites (e.g. payment processing);▪ Main concerns: resilience under normal and extreme loads, transaction response times, security against hacking, integration with back end or legacy systems, integration with 3rd party components, availability 24x7x365. Security of the web service from hacker attack.

Master Test Planning Process

Objective

To document and agree a scope, approach, responsibilities and timescales for the testing.

Inputs

- Project documentation, requirements, and technical design as available.
- Risk Template (Appendix A)
- Master Test Plan Checklist (Appendix B)
- Master Test Plan Template (Appendix C) (not included)

Deliverable

- Master Test Plan.

Process

- Select project type;
- Risk analysis;
- Prioritize, estimate, schedule;
- Review;
- Prepare MTP.

Test Stages

This document assumes testing will split into three broad stages and performed by the three groups as follows:

- Development Testing (performed by developers)
- System Testing (performed by the independent testers)
- Customer/Acceptance Testing (performed by customer or independent testers).

Test Templates

The following test templates are used in Master Test Planning:

Risk Template: Appendix A provides a table of risks categorized by project type. The risks are used to identify what is in and out of scope. Each risk is to be addressed by a test

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objective. The table is also used to allocate responsibility to one of the three stages and collect estimates for the testing itself. This document is called the Draft Test Process.

MTP Checklist: This checklist is used as an agenda for the review meeting used to agree the Draft Test Process. The questions that arose at the meeting and their resolutions found are used to complete the MTP document.

MTP Template: This is a document template used to create the Master Test Plan. The Draft Test Process is inserted into the MTP for final review.

Master Test Planning Process

Objectives

- Agree risks to be addressed by the testing.
- Agree how each risk is to be addressed and by whom.
- Define the stages of testing to be used
- Define acceptance Criteria for the project and test stages.
- Estimate the effort and duration of each test stage
- Identify the key resources required and contribution to be made for each test stage.
- Document issues, concerns, assumptions and dependencies.
- Identify any particular test environment requirements (web site, databases, interfaces to other services)
- Document all the above in the Master Test Plan.

Process Narrative

Risk Analysis

- Gather all project documentation relating to requirements, technical architecture.
- Make notes of what you believe are the main concerns (i.e. the risks) for the project, based on your experience and by talking to the main contributors to the project.
- Select the type of project (according to the criteria above).
- Schedule a MTP Workshop to review the risks assessment.
- Using the risk Template and the selected project type as a guide, identify the candidate risks of concern.
- Identify those risks that are 'suspect' i.e. where there is uncertainty that there is a problem.
- Add any additional risks that are possible given the uniqueness of this project.
- Create the first draft Risk Assessment from the Risk template.

MTP Workshop

- Convene the Risk workshop with the main players in the project. Include those people responsible for managing and/or doing the testing. Involve customer representatives, if appropriate.
- Use the MTP checklist as an agenda for the meeting.
- At the risk workshop scan the draft Risks Assessment.
 - For each risk, agree whether it should be within the scope of testing.
 - Add or remove risks as required.
 - Allocate each risk to a stage of testing and assign an owner.
- Document any changes; agree action to be performed.
- Decisions made on the agenda items should be documented.

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- Decisions that can't be made at the meeting should be minuted as actions to be followed up.

Estimation

- Those responsible for the testing should provide estimates to complete the testing they own.
- Construct the test process from the stages of testing, and the risks/test objectives.
- Allocate estimates to each stage and copy to those responsible for managing the testing for their approval.

Prepare MTP

- Chase the actions arising out of the MTP Workshop.
- Gain agreement on the estimates for the test stages.
- Consolidate and document the scope of testing, the risks to be addressed and the overall approach to testing in the project.
- Document assumptions and dependencies; include those on external parties or the customer.
- Document any outstanding issues/actions in the MTP.
- Draft the MTP using the MTP Template and include the Test Process in it.

Final Review, Sign-Off

- Convene a review meeting to assess the MTP and gain agreement on the test approach and the MTP.

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Risk Template

	Failure Mode or Objective	Project Type			IN Scope?	Test Stage/ Responsibility			Usual Approach/Test Objective	Estimate
		Simple	Medium	Complex		Developer Testing	System Test	User Acceptance		
	Client Platform									
1	Which browsers, versions and O/S platforms will be supported, includes non-frames, non-graphic browsers etc.)?	Y								
2	New platforms: Web TV, Mobile Phones, Palm Pilots etc.	Y								
3	Connection through commercial services e.g. MSN, AOL	Y								
4	Browser HTML Syntax Checking	Y								
5	Browser compatibility HTML Checking	Y								
6	Client configuration e.g. unusable, local character sets being rejected by database etc.		Y							
7	Client configuration: Client turns off graphics, rejects cookies, Cookies time out, Client doesn't have required plug-ins etc.	Y								
8	Minimum supported client platform to be determined/validated	Y								
	Component Functionality									
9	Functionality in components that execute only within the browser (VBScript, Java applets etc.)		Y							
10	Client web-page object loading (speed etc.)	Y								
11	Custom-built component functionality (e.g. COM components or middleware on servers)			Y						

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	Failure Mode or Objective	Project Type			IN Scope?	Test Stage/ Responsibility			Usual Approach/Test Objective	Estimate
		Simple	Medium	Complex		Developer Testing	System Test	User Acceptance		
12	Bought-in component functionality (e.g. COM components or middleware on servers)			Y						
13	HTML page content checking - spelling, HTML validation	Y								
	System/Application functionality									
14	End-to-end system functionality			Y						
15	Loss of context/persistence between transactions (e.g. reject cookies, delete cookies etc.)		Y							
16	Weird Paths (connect, reconnect, disconnect, back, resubmit etc.)	Y								
	Integration									
17	On/off site orphaned links	Y								
18	Integration of components that run on servers			Y						
19	System integration		Y							
20	System integration to internal customer and external interfaces (e.g. banks)			Y						
	Security									
21	Confidentiality of information			Y						
22	Security against hacker attack through application, browser interface, via firewall or ISP etc.			Y						
	Localization									
23	Local address formats (zip code, postcode, department etc.)		Y							

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	Failure Mode or Objective	Project Type			IN Scope?	Test Stage/ Responsibility			Usual Approach/Test Objective	Estimate
		Simple	Medium	Complex		Developer Testing	System Test	User Acceptance		
24	Local currencies, taxes or other arrangements			Y						
25	For a multi-lingual site, are screens, messages, help etc translated correctly?			Y						
	Usability, User Documentation									
26	Visual browser validation (varying browsers work OK?)	Y								
27	Download speed of web pages/graphics using LAN/dial up connection	Y								
28	Inability to do common tasks easily (as easy as existing system?)		Y							
29	Adherence to Web conventions		Y							
30	Client configuration e.g. screen resolution making system unusable		Y							
31	Quality of user guide/help screens		Y							
32	Can interface be personalized?			Y						
	Performance, Volume, Stress									
33	Can back-end systems support fast response times?			Y						
34	Ability of the system to support loads up to maximum design load and meet response time requirements throughout			Y						
35	Ability of the system to support extreme loads and regulate access or fail gracefully			Y						
36	Ability of system to accommodate data volumes			Y						
	Concurrency									

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	Failure Mode or Objective	Project Type			IN Scope?	Test Stage/ Responsibility			Usual Approach/Test Objective	Estimate
		Simple	Medium	Complex		Developer Testing	System Test	User Acceptance		
37	Ability of system to deal with anticipated concurrent users			Y						
38	Contention/locking of web, application or database server resources.			Y						
	Infrastructure									
39	System management and control of infrastructure components works correctly			Y						
40	Failover capability in all scenarios			Y						
41	Load balancing			Y						
	Availability/Resilience/Recovery									
42	Resilience of system when run for extended periods - 24x7 service availability.			Y						
43	Backup and recovery from 'minor' failures			Y						
44	Disaster recovery scenarios can be recovered correctly.			Y						

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Master Test Plan Check List

Use this list as an agenda for the Master Test Planning workshop.

Workshop Objectives

- Using the Draft Risks Assessment, to identify the risks to be addressed, assign ownership of those risks.
- Make decisions on the testing approach so they can be documented in the Master Test Plan for the Project.

Agenda

- Use the draft Risks Assessment, line by line, to review the main risks associated with the system to be developed, add new risks, and eliminate 'non-risks'.
- Test Items
 - Features that will be Tested
 - Features that will not Tested
 - Other Features to be Tested
- Approach (what techniques and tools are required?)
- Testing Levels (Test Stages)
 - Responsibilities
 - Environmental Needs
 - Completion Criteria
 - Test Deliverables
 - Approvals (sign-off responsibility)
- Configuration Management (how will releases be controlled?)
- Regression Testing (Is it necessary? Who will do it? How?)
- Training Requirements (new skills required?)
- Planning Risks and Contingencies (what could go wrong in our planning?)
- Glossary/Terminology (any new or changed terminology required?) All issues should be resolved or actions assigned to ensure these decisions are made promptly. All decisions and actions should be documented in the Master Test Plan or recorded in the minutes respectively.