SQE Test Plan Template

Identifier

- Provide a unique "short" name.
  - "Short" name is label for cross-referencing the document within the configuration management process and may contain the version and revision information.
- Version/Revision Identifier
- Version Author and contact information
- Revision history

References

Include all documents that form the basis for this plan (e.g., include test Configuration design and code if available). Use name and Version/revision identifier at a minimum.

If testing guidelines or procedures for item transmittal, incident reporting and tracking, change control, or test configuration management are missing or inadequate, they must be addressed in the test approach section of the test plan.

- Project plan
  - Any other higher level test & evaluation plans
- Any relevant design specifications
- User/operator/installation guides
- Relevant software problem reports
- Prior/lower level test reports
- Reused test descriptions
- Testing guidelines and/or procedures
- Standards/Methodologies for development/testing
- Procedures covering:
  - Transmittal of test items
  - Test incident reporting
  - Change control
  - Configuration Management

Introduction

Describe objectives and scope of evaluation activities that immediately precede and follow those covered by this plan.

Describe resource (budget, testing staff, subject experts, data, execution environments) and schedule assumptions.

Summarize test configurations, product risk, and features to be tested. Specify overall test objectives.

- Evaluation context assumptions
- Resource and schedule constraints
- Scope and objectives of testing
- Scope of plan including:
- Participant groups and individuals
- Assigned responsibilities
- Objectives of plan and planning process

Summarize basis documents, major activities and the test descriptions and reports that will be produced Identify key individual and group contributors and their general responsibilities.

Describe planning philosophy and communication & coordination criticality.

Test configurations

Identify set of configurations to be tested. Configurations include software, data structures, user guides and procedures. Each configuration, after the first, must be accompanied by an inter-version change report.

Reference configuration delivery schedule in the project plan. Specify transmittal, problem reporting and change control procedures to be used. Identify supplier's key contact.

- Configuration and version/revision identifiers
- Version contact information
- Reference to transmittal, problem reporting and change control procedures.
- Excluded items

Items to be specifically excluded may be identified. Exclude items that may be incorrectly assumed to be included in the testing. Specify reasons for exclusion.

Product risk issues

Identify the issues critical to product success. Include reasons for criticality such as usage assumptions.

- Critical areas (possibly including)
  - Essential functions
  - Reliability
  - Usability
  - Safety
  - Security

    - Privacy
- Failure impact risks (covering)
    - Enterprise
    - Operations
- Fault likelihood risks
- General Risk assumptions

Features to be tested

Identify the categories, objectives, and combinations to be tested. Use a two or three level scheme to prioritize them.

- Categories of test objectives
    - Functions
    - External interfaces
    - Constraints
    - States
    - Data conditions
    - Scenarios
    - Combinations of attributes
- Combinations of objectives
- Excluded features

Identify the test design spec associated with each category and combination.

Features to be specifically excluded may be identified. Exclude features that may be incorrectly assumed to be included in the testing. Specify reasons for exclusion.

Approach

Detail the levels of testing covered by the plan and the objectives, scope, and rationale for each level. Summarize the test environments associated with each level and the parties with primary responsibility.

Describe the major evaluation activities (analysis, design, implementation, execution, assessment) at each level and the techniques (analysis, review, & test) and tools to be used for each. Include the methods to be used to evaluate test work products.

- Levels of testing including environments and responsible parties
- Major evaluation activities, techniques, and tools
- Reuse of testware descriptions and/or implementations
- Data sources and extract & validation techniques
- Result recording & checking methods
- Test metrics
- Tracing requirements

- Relationship of testing to development activities
- Communication and coordination policies and procedures
- Missing test guidelines and Test Configuration Management procedures

Identify testware descriptions (objectives inventories, design specs, case specs) or implementations (data, procedures, programs) to be reused.

Identify production, test, and third party data sets to be used and the data extract and validation techniques used to check them.

Describe the methods to be used to record the actual results and compare them against requirements.

Define the measures that will be used to assess test completeness, effectiveness, cost, and status and the methods to be used to gather the measurement data.

Specify requirements for tracing test data to test cases and procedures to test objectives to software requirement and design elements

Describe input/output relationship between work products of test and development activities. Describe tester's role in development reviews and developer's role in test reviews.

Specify mechanisms (E-mail messages, status reports and meetings) for intergroup communication and coordination.

Supply missing test guidelines and procedures for incident and test configuration management.

Termination criteria and resumption requirements

Identify all key test criteria and the source for that information

- Resumption requirements
- Regression Testing Policy
- Completion criteria
- Suspension criteria
- Pass/fail criteria

Specify correction, test, and documentation requirements to be met by a new configuration following failed testing.

Describe any policies regarding the re-running of successful tests when new test configurations (that fix bugs or extend functionality) are transmitted.

Specify criteria (in terms of regression, open issues, risk assessment, and code coverage) for the completion of test configuration execution and describe the corresponding completion assessment techniques.

Specify criteria (in terms of criticality of test incidents) for the suspension of all or a portion of test configuration execution.

Specify criteria (in terms of status of required and optional test objectives) for determining whether a test configuration has passed or failed testing.

Test deliverables

Identify the test plans, inventories of objectives, design specs, and case specs to be delivered at project end.

- Test Descriptions
- Testware implementation
- Test Reports

Identify the test data sets (input and output), test procedures, and custom test support software (along with its user documentation) to be delivered.

Identify the test log, incident, status, and summary reports to be delivered.

Specify evaluation requirements for each deliverable.

Testing tasks

Identify the tasks necessary to prepare for and perform test execution. Identify the test work products resulting from and required by each task. Specify intertask dependencies.

- Test planning
- Test analysis
- Test design
- Test implementation
- Test execution
- Test evaluation

Identify those responsible for each task.

Environmental needs

Identify the set of test environments to be used. Detail necessary and desired properties of these environments. Include hardware, network and system software, coresident application software, mode of usage (stand-alone)

- Detailed test environments
- Custom & commercial tool details
- Support documentation and supplies
- Detail special tools both custom and commercial.
- Describe procedures for the qualification of environmental components and tools.
- Identify any other testing needs.
- Identify those responsible for all needs not currently available to the test group.

Staffing & training needs

Identify any special skills required by the testing, the application, or the test environment. Specify staffing needs by role (manager, analyst, technician, reviewer) and skill/experience level. Identify specific training needs, alternatives to satisfying those needs, and responsible parties.

- Skill requirements
- Staffing pattern
- Training needs and options

Summary of responsibilities

Collect responsibility designations from all sections above. Responsible parties may include management, developers, testers, users, operations, technical support, data administration, quality support, Configuration Management, and tool or training vendors.

- Consolidated responsibilities

Schedule

Identify significant schedule constraints such as configuration and resource availability as well as the completion deadline. Summarize key events (configuration transmittals and software reviews) and major milestones (termination on first configuration) using relative scheduling.

- Availability and deadline constraints
- Key activities and major milestones
- Task estimates
- References to project schedule

Estimate the time required to perform each testing task. Specify usage periods for testing resources (facilities, tools, staff).

- Refer to testing tasks in master project schedule.

Planning risks & contingencies

Specify the relationship between product risks and plan elements (to permit adequacy assessment). Identify product risks that are not adequately managed by the plan.

Identify riskiest assumptions and likely results

- Product risk / plan element correlation
- High-risk planning assumptions
- Strategy options

Specify contingency plans for likely alternatives

Approvals

Identify approvers by name and title.

- Contributors and approvers

Collect dated signatures.

Glossary

Include all critical terms to aid communication.

- Key terms and Definitions