

Sample Content of an Acceptance Test Plan

1 Purpose

It describes the computerized system to be used for the acceptance testing, identifies the tests to be performed, and provides schedules for test activities. Major functions being validated. Reason System was developed.

2 Acceptance Test Environment

- Configuration documentation
 - hardware (model numbers, location for each)
 - application software (source code, version)
- System software components
 - operating systems (version #, operating systems, utilities, software used to generate input data or analyze results)
- System loading considerations
 - possible impact of other systems
- Security considerations
 - Define user accounts/passwords and privileges for each tester, security of validation info, including informing personnel involved
- Special hardware considerations
 - interfaces to instruments
- Related documents
 - list documents used to generate plan, such as system development docs, user manuals, SOPs

3 Assumptions, Exclusions, Limitations

For example ...

- Assumptions about validity of related system components
- Functions not executed by plan (if any)
- Which interfaces when available
- Known limitations of plan and system (define boundaries of testing)

4 Responsibility and Authority

Who

- Prepares plan
- Approves plan
- Executes plan
- Evaluates Results
- Determines plan satisfactorily completed
- Writes summary report
- Approves system for production use
- Archives acceptance test package

} may be users, system developers, QA professionals

Notes:

- ◇ Execution may be assigned to anyone with ability and basic training to follow the steps in the plan.
- ◇ Person who executes the plan need to
 - maintain the test log (see section 6),
 - document all errors,
 - track follow-through on all deviations.
- ◇ Persons who evaluate results need to summarize all testing results in a summary report.
- ◇ A team approach is best to ensure the plan is successfully executed.

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5 Test Specification:

5.1 Test Data Sets

- Depict data to be used during testing in detail
- Multiple data sets needed (functional, volume, ...)
 - normal test data
 - normal test data seeded with erroneous data
 - test data to check field limits
 - test data to check exceptions/special occurrences
 - stress testing (large volume, power failure)
- Obtain data from
 - previous experiments, studies, production runs, tests
 - newly created specifically for validation testing
- Document
 - what is covered by each data set
 - limitations of each data set (i.e. experimental data may not cover all error cases)
- Archive all data sets

Note:

- ◇ Users need to write this section of the plan.

5.2 Execution Steps

For each major acceptance test:

- Purpose of test
- Overview of test strategy
- Step-by-step description of each detailed operation (to allow tests to be replicated exactly)
- Checklists to formally date and initial major completed sets of tests (milestones)

Notes

- ◇ Include steps needed to review systems documentation (user manuals, SOPs, system development documentation, training procedures)
- ◇ For large systems, testing may be performed in several phases, with results evaluated following each phase
- ◇ If automated test methods used
 - describe in detail
 - electronic files should be listed (or a portion of the file, with a description of how the entire file can be printed)
- ◇ Automated test tools must also be validated
- ◇ Magnet media files should be listed (detailed contents in appendix)
- ◇ Users need to write this Section of the Plan.

5.3 Expected Results

- Detailed descriptions of expected results for each output
- Where possible general descriptions of expected results (e.g. when patterned data is used)
- For interactive portions of system, output can be listed in section 5.2 (detailed execution steps) to improve understanding. In this case, add a reference to section 5.2.
- Aim: minimize subjective decisions, quantify wherever possible.

Note:

- ◇ Users need to write this section of the Acceptance Test Plan.

5.4 Acceptance Criteria

- using data in section 5.1 following the steps in section 5.2 obtain the results listed in section 5.3
- Specify ranges of acceptable results (any allowable deviations)
- State any methods used to analyze results
 - 100 % proofing
 - manual calculations

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- automated results matching
- If mathematical methods used
 - define all formulas used in detail
 - state acceptable result ranges

Some of this information would normally be contained in the System Specifications document

6 Error Resolution

- Specify how errors will be documented:
Info to capture is as follows
 - who found error
 - date/time error found
 - describe error circumstances
 - evaluation of error
 - can testing resume?
 - error resolution or work-around
 - who resolved
 - date/time resolved
 - approvals
 - retesting needed (what testing needs to be repeated)
- Specify where errors will be documented
 - test log
 - error log
 - error forms
- Specify the general procedure for handling errors
 - minor errors document and resume testing
 - minor errors with potential data compromise further input may be needed before testing resumes
 - major errors document and get input
- Specify people responsible for making decisions about resuming testing and retesting
- Specify that you will maintain a test log diary of all testing events
 - summary (minimal) of each error that occurs with a reference to an error form or error log entry
 - include all unexpected results even operator errors
- Specify that a summary report of validation testing will be produced

7 Documentation

- List all documentation that will be archived as a part of acceptance testing - this will be the complete acceptance test documentation package
- Documentation includes:
 - original acceptance test plan
 - acceptance test plan with checklists signed and dated
 - all acceptance test data sets
 - test results (listings and/or electronic media)
 - test log
 - error log or error forms
 - memos generated during testing
 - acceptance test summary report
 - all approvals
 - formal production release memo (from the systems developers to users and QAU)
- Indicate media storage used for each document listed above (hard copy, electronic media, microfiche, etc.)