

# **Standard Glossary of Terms Used in Software Testing**

## **Release Notes**

Version 3.4

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International Software Testing Qualifications Board

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## Release Notes

### 1.1. Version 3.4 of the Glossary 14 May 2020

This new version is a maintenance release focusing on improvements for terms that are not used as keywords in current ISTQB Syllabi.

Changes have been included based on one of the following reasons:

- Catch-up alignment with the recent CTFL-PT Syllabus, including new key terms;
- Change requests raised by users of the Glossary that are related to terms used in the new Syllabi;
- Changes of the international standards referenced in the Glossary for terms, especially the ISO 25010 Standard for Software Quality;
- Removal of terms that are neither keywords nor testing terms.

The changes are categorized in different change types and listed in separate tables below and are based on the Glossary Principles.

For the references and Syllabus acronyms used, see the Glossary Introduction.

## 1. New terms added

The table below enlists the terms added in this release.

Name	Definition	See Also	Reference	Remark
capacity testing	Testing to evaluate the capacity of a system.			Used in CTFL-PT 2018
concurrency testing	Testing to evaluate if a component or system involving concurrency behaves as specified.			Used in CTFL-PT 2018
continuous integration	A software development procedure merging, integrating and testing all changes as soon as they are committed within an automated process.			Used in CTFL 2018, CTAL-AT 2019, CTAL -TTA 2019, CTAL-ATT 2019
end-to-end testing	A type of testing in which business processes are tested from start to finish under production-like circumstances. Synonym E2E testing			Used in CTFL-MAT 2019
load generator	A tool that generates a load for a system under test.	load testing		Used in CTFL-PT 2018
test-first approach	An approach to software development in which the test cases are designed and implemented before the associated component or system is developed.	test-driven development		Used in CTFL 2018, CTFL-AT 2014, CTAL-TA 2019 and CTAL-TTA 2019

Name	Definition	See Also	Reference	Remark
testing quadrants	A classification model of test types/levels in four quadrants, relating them to two dimensions of test goals: supporting the team vs. critiquing the product, and technology-facing vs. business-facing.			Used in CTFL-AT 2014

## 2. Terms renamed

The table below enlists the terms renamed in this release, with possibly changed definitions.

Name	Definition	Old Name	See Also	Reference	Remark
checklist-based review	A review technique guided by a list of questions or required attributes.	checklist-based reviewing			The verb reviewing (present participle form) is replaced with the noun review in the term name
Computer Aided Software Testing (CAST)	The computing-based processes, techniques, and tools to support testing.	CAST			Terms are not allowed to be acronyms.
failed	The status of a test result in which the actual result does not match the expected result.	fail			The root form of the verb fail is replaced with the past participle in the term name.
failover	The backup operational mode in which the functions of a system that becomes unavailable are assumed by a secondary system.	failover testing			Failover testing is replaced with the failover activity.
passed	The status of a test result in which the actual result matches the expected result.	pass			The root form of the verb pass is replaced with the past participle in the term name.

### 3. Term definitions changed

The table below enlists the terms with changed definitions in this release, with possible changes in other attributes (Acronym, See Also, Reference).

Name	Definition	Acronym	See Also	Reference	Remark
audit	An independent examination of a work product or process performed by a third party to assess whether it complies with specifications, standards, contractual agreements, or other criteria.				Improved/shortened the definition and replaced compliance with complies
cause-effect graphing	A black-box test technique in which test cases are designed from cause-effect graphs.				Replaced test design technique with test technique
compliance	Adherence of a work product to standards, conventions or regulations in laws and similar prescriptions.				Improved the definition based on feedback from IREB
condition coverage	The coverage of condition outcomes.				Improved/shortened the definition
control flow graph	A directed graph representing all possible control flows through a component or system.				Replaced abstract representation with directed graph
coverage	The degree to which a specified coverage item has been exercised, expressed as a percentage.			After ISO 29119	Improved the definition wording
coverage item	An attribute or combination of attributes derived from one or more test conditions by using a test technique.				Shortened the definition
data flow	The sequence of possible changes to the state of data objects.				Improved/shortened the definition
efficiency	The degree to which resources are expended in relation to results achieved.				Improved/shortened the definition
equivalence partition coverage	The coverage of equivalence partitions.				Shortened the definition and made it consistent with all terms relating to coverage
escaped defect	A defect that was not detected by a testing activity that is supposed to find that defect.				Improved the definition wording
executable statement	A source code statement that, when translated into object code, can be executed in a procedural manner.				Improved/shortened the definition
expected result	The observable predicted behavior of a test item under specified conditions based on its test basis.				Improved/shortened the definition

Name	Definition	Acronym	See Also	Reference	Remark
exploratory testing	An approach to testing in which tests are dynamically designed and executed based on knowledge, exploration of the test item and the results of previous tests.				Improved the definition wording
feature	A distinguishing characteristic of a component or system that provides value for stakeholders.				Improved the definition based on IREB feedback
horizontal traceability	The traceability of work products at the same hierarchical level.				Improved/shortened the definition
independent test lab	An organization responsible to test and certify that the software, hardware, firmware, platform, and operating system follow all the jurisdictional rules for each location where the product will be used.	ITL			Added the acronym ITL to the term name
interface testing	A type of integration testing performed to determine whether components or systems pass data and control correctly to one another.			After ISO 24765	Aligned the definition with the ISO 24765 Standard
negative testing	Testing a component or system in a way in which it was not intended to be used.				Improved/shortened the definition
modified condition / decision coverage	The coverage of all possible combinations of all single condition outcomes within one statement.				Shortened the definition and made the wording consistent with all terms relating to coverage
multiple condition coverage	The coverage of all possible combinations of all single condition outcomes within one statement.				Shortened the definition
N-switch coverage	The coverage of sequences of N+1 transitions.				Improved/shortened the definition
operational environment	The intended environment for a component or system to be used in production.				Removed the second sentence and improved the definition wording
pair testing	An approach in which two team members simultaneously collaborate on testing a work product.				Removed the examples, removed the second sentence, and improved the definition wording
path	A sequence of consecutive edges in a directed graph.				Removed the examples and improved the definition wording

Name	Definition	Acronym	See Also	Reference	Remark
path testing	A white-box test technique in which test cases are designed to execute paths in a control flow graph.				Made the definition wording more specific
peer review	A review performed by others with the same abilities to create the work product.				Improved the definition based on feedback from IREB
portability	The degree to which a component or system can be transferred from one hardware, software or other operational or usage environment to another.			After ISO 25010	Aligned the definition with the ISO 25010 Standard
quality control	A set of activities designed to evaluate the quality of a component or system.		testing		Added See Also: testing
reactive testing	Testing that dynamically responds to the behavior of the test object and to test results being obtained.				Removed the second sentence and improved the definition wording
resource utilization	The degree to which the amounts and types of resources used by a component or system, when performing its functions, meet requirements.			After ISO 25010	Aligned the definition with the ISO 25010 Standard
risk likelihood	The probability that a risk will become an actual outcome or event.				The word estimated was removed from the definition
scalability	The degree to which a component or system can be adjusted for changing capacity.				Made the definition wording consistent with all terms relating to quality characteristics
scenario-based review	A review technique in which a work product is evaluated to determine its ability to address specific scenarios.				Made the definition wording consistent with all terms relating to reviews
SQL injection	A type of code injection in the structured query language (SQL)				Improved the definition wording
state table	A grid showing each possible event and the resulting valid and invalid transitions for each state.				Improved/shortened the definition
test cycle	An instance of the test process against a single identifiable version of the test object.				Replaced the word execution with instance and replaced the word release with version to improve the definition

Name	Definition	Acronym	See Also	Reference	Remark
test process improvement	A program of activities undertaken to improve the performance and maturity of the organization's test processes.				Improved/shortened the definition
test result	The consequence/outcome of the execution of a test.				Removed the second sentence from the definition
test run	The execution of a test suite on a specific version of the test object.				Replaced test with test suite
test script	A sequence of instructions for the execution of a test.				Replaced test suite with test
test session	An uninterrupted period of time spent in executing tests.				Removed the second and third sentences
test specification	The complete documentation of the test design, test cases and test scripts for a specific test item.				Replaced test procedure with test scripts
usability test script	A document specifying a sequence of actions for the execution of a usability test. It is used by the moderator to keep track of briefing and pre-session interview questions, usability test tasks, and post-session interview questions.				Removed the test procedure specification from the See Also
Website Analysis and Measurement Inventory (WAMI)	A commercial website analysis service providing a questionnaire for measuring user experience and assessing delivery of business goals online.				Improved the definition

## 4. Terms removed

Some terms have been removed because they are not used as keywords in any syllabus and, in addition, defining them does not add any value:

Name	Remark
accuracy testing	The term is only used in the CTAL-TA 2012 and is not a keyword.
actor	The term is neither a keyword nor a testing term.
analytical testing	The term is only used in the CTAL-TTA 2019 and is not a keyword.
best practice	The term is neither a keyword nor a testing term.
branch testing	The term is not used in any Syllabus.
burndown chart	The term is neither a keyword nor a testing term.
Computer Aided Software Engineering (CASE)	The term is neither a keyword nor a testing term.
collapsed decision table	The term is neither a keyword nor a testing term.
component	The term is neither a keyword nor a testing term.
condition testing	The term condition is already defined in the Glossary.
configuration	The term is neither a keyword nor a testing term.
custom software	The term is neither a keyword nor a testing term.
decision condition coverage	After the retirement of the CTAL-TTA 2012, the term will no longer be used.
decision table	The term is neither a keyword nor a testing term.
domain analysis	After the retirement of the CTAL-TTA 2012, the term will no longer be used.
entry point	The term is neither a keyword nor a testing term.
exit point	The term is neither a keyword nor a testing term.
fault attack	The term is not used in any Syllabus.
feasible path	The term is not used in any Syllabus.
freedom from risk	The term is mentioned in one Syllabus but not elaborated upon.
Function Point Analysis (FPA)	The term is neither a keyword nor a testing term.
hardware-software integration testing	The term is mentioned in only one Syllabus but not elaborated upon.
Hazard Analysis	The term is neither a keyword nor a testing term.
incident management	The term is already covered by defect management which is a keyword.
Installation Guide	The term is neither a keyword nor a testing term.
invalid testing	The term is now a synonym of negative testing.
lifecycle model	The term is now a synonym of software development lifecycle.
maintainability testing	The term maintainability is already defined in the Glossary.
operational testing	The term is only used in the CTFL-GT 2019 and is not a keyword.
orthogonal array	After the retirement of the CTAL-TA 2012, the term will no longer be used.
orthogonal array testing	After the retirement of the CTAL-TA 2012, the term will no longer be used.
pacing time	The term is not used in any Syllabus.
portability testing	The term portability is already defined in the Glossary.
problem	The term is neither a keyword nor a testing term.
process	The term is neither a keyword nor a testing term.
process improvement	The term is neither a keyword nor a testing term.



Name	Remark
project	The term is neither a keyword nor a testing term.
qualification	The term is neither a keyword nor a testing term.
quality gate	The term is neither a keyword nor a testing term.
recoverability testing	The term recoverability is already defined in the Glossary.
regression-averse testing	The term regression-averse test strategy is already defined in the Glossary.
reliability testing	After the retirement of the CTAL-TA 2012, the term will no longer be used.
requirements management tool	The term is neither a keyword nor a testing term.
resource utilization testing	The term resource utilization is already defined in the Glossary.
robustness testing	The term robustness is already defined in the Glossary.
simulation	The term is neither a keyword nor a testing term.
software	The term is neither a keyword nor a testing term.
software integrity level	The term is not used in any Syllabus.
specification	The term is neither a keyword nor a testing term.
state transition	The term is neither a keyword nor a testing term.
state transition diagram	The term is neither a keyword nor a testing term.
system	The term is neither a keyword nor a testing term.
test comparator	The term is not used in any Syllabus.
test design tool	The term test design is already defined in the Glossary.
test input	The term input is already defined in the Glossary.
test procedure specification	The term test procedure is already defined in the Glossary.
three-point estimation	The term is neither a keyword nor a testing term.
unreachable code	The term is neither a keyword nor a testing term.
use case	The term is neither a keyword nor a testing term.

## 5. Synonym updates

There are some updates among the synonyms. Please recall that in the Glossary, 'synonym' denotes an alternative name for a term. Synonyms are commonly used by some communities, but within ISTQB®, they are not the preferred name of the term.

### New synonyms:

Term Name	Synonym	Remark
software development lifecycle	lifecycle model	Removed the term lifecycle model and made it a synonym of the term software development lifecycle which covers all terms that mean the same thing.
test result	result	Corrected a mistake in the Glossary

### Removed synonyms:

Term Name	Synonym	Remark
none		