



ISTQB: TEST Case Core

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Rules



Test Process

Project

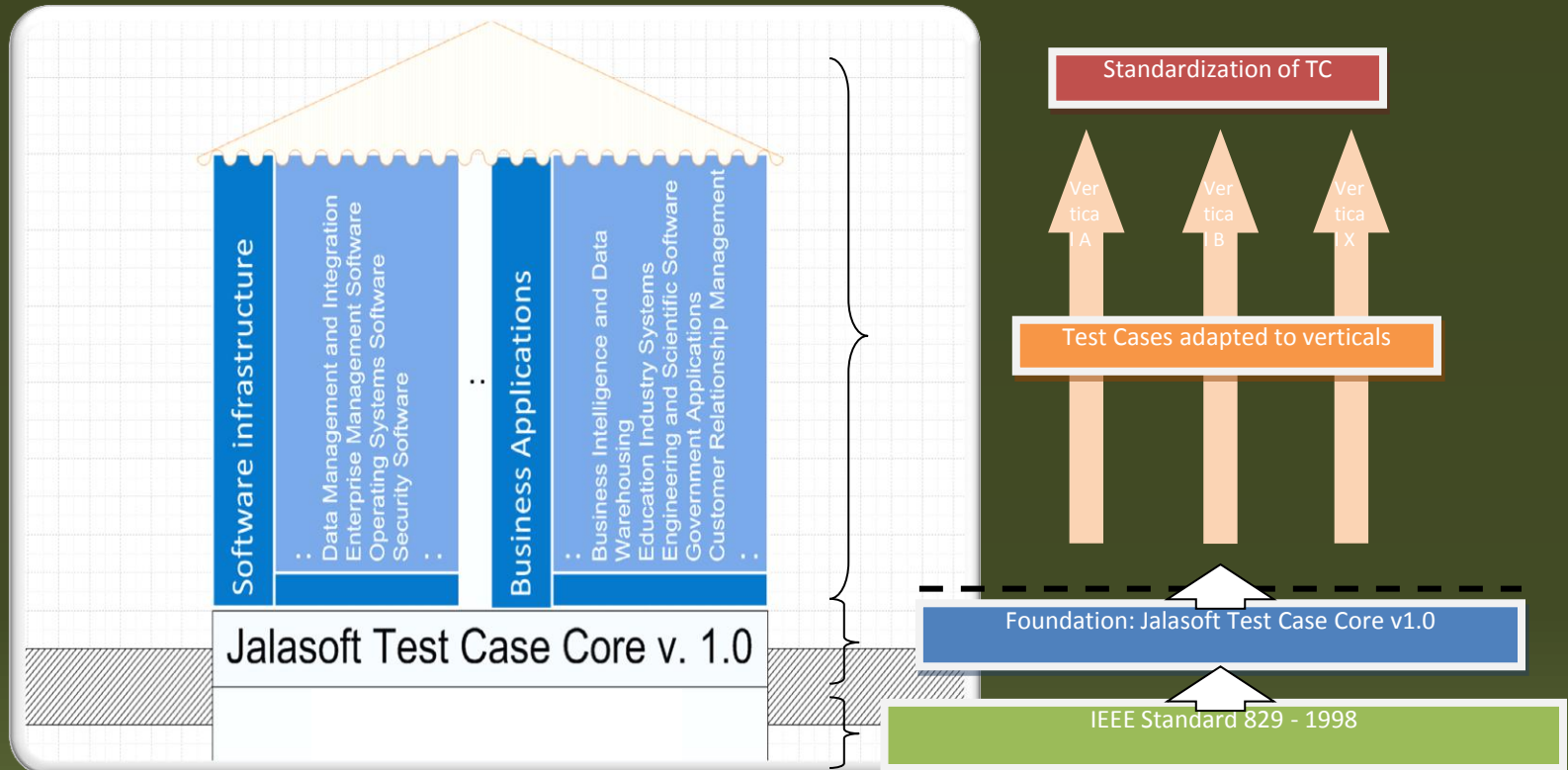
Iteration

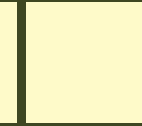
User Stories

Test sets (Regression)

Test Cases

Test Case Core





Fields on the TC Core

- Test Case Title
- Priority
- Description
- Requirements
 - *Hardware Requirements*
 - *Software Requirements*
 - *Setup instructions*
- Steps

Criteria results

- Expected results
 - *Verification*
- *Attachments*
- *Related PR*

Test Case Creation Date

Running Estimated Time



What is a Test Case?

A test case consists of a set of input values, execution preconditions, expected results and execution post-conditions, developed to cover certain test condition(s).



How run a Test Case?

- When we execute a Test:
 - What we are trying to test?
 - Inputs
 - Results by these inputs
 - How we get ready for and run the tests



High level test cases

- When I will create these ones?
- What fields will be part of High level test cases?

Test Case Title

IEEE Std 829-1998	Description	Jalasoft Test Case Core field	Description
Test case specification identifier	Specify the unique identifier assigned to this test case specification.		
		Test Case Title	It should briefly explain what is tested in the test case Test Case ID—a different field—is usually provided by the Test Suite system; it could be composed by digits or alphanumeric values.

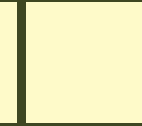
Title -Best Practices

- It should describe the purpose of the test case in a simple manner.
- It should be clear and understandable for anybody.
- It should not be long. We suggest not more than 80 characters.
- Title may contain a specific code (for instance an acronym of the area, project or user story).

Description, Attachments

Std 829-1998	Description	Jalasoftware Test Case Core field	Description
Test items	<p>Identify and briefly describe the items and features to be exercised by this test case.</p> <p>For each item, consider supplying references to the following test item documentation:</p> <p>a) Requirements specification;</p> <p>b) Design specification;</p> <p>c) Users guide;</p> <p>d) Operations guide;</p> <p>e) Installation guide.</p>		
		Description	Test Case description
		Attachments	

Description – Best Practices



- Do not include information that should be detailed in another fields, e.g. requirements, set up configurations or verification.
- In order to avoid too long descriptions, this field can contain references to the specification document or any similar document.
- Avoid using the acronym TBD (to be defined).

Attachment – Best Practices

- Add any needed attachments to the test case at the moment you design the TC.
- You can refer to the attachment in a specific step, so the person who runs the TC knows when to use it.
- If the attachment is a script or executable, you can describe how to use them.

Attachment – Best Practices

- Use attached documents to:
 - Verify the UI design
 - Verify the related documentation (Help, error/successful messages standard).
 - Describe special configurations (with longer and more specific details).

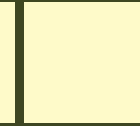
Requirements: Software and Others

Software	Specify the system and application software required to execute this test case. This may include system software such as operating systems, compilers, simulators, and test tools. In addition, the test item may interact with application software.	Software	Software requirements for the test case
Other	Specify any other requirements such as unique facility needs or specially trained personnel.		

Hardware Best Practices

- It should include enough information to identify the correct hardware.
- For instance, it should give technical details about processor, RAM, x64, x86, etc.

Software – Best Practices



- It should include enough information to identify the correct software and details about version and edition.
- For instance, OS (Windows, Linux, etc), DB (SQL, Postgres, etc), browser type (IE, Firefox, etc), specific service packs, antivirus, additional applications, etc.
- If the TC does not apply to all the versions of the product that will be tested, the product version should be included.

IEEE Std 829-1998	Description	Jalasoft Test Case Core field	Description
Special procedural requirements	Describe any special constraints on the test procedures that execute this test case. These constraints may involve special set up, operator intervention, output determination procedures, and special wrap up.	Setup Instructions	Instructions to set up the environment or other feature to needed to test.

Setup Instructions

– Best practices

- It should include specific characteristics of the environment, for instance, the kind of installation of the DB server, configuration of the product to test, security settings, etc.
- Include previous configurations that will be needed on the verification, for instance grant permissions for a test account

Date, Priority, Related PR, Time

		Test Case creation Date	Usually generate by the Test Suite system. The Engineer does not interact with this field
		Priority	The priority to execute the TC
		Related PR	Related problem report with the test case
		Running Estimated Time	It is intended to help to estimate the required effort.

Priority – Best Practices

- Define a range of numbers or levels, for instance:
 - Priority 1: Indicates that the test case must be run (very important test case), generally applied to Acceptance test cases.
 - Priority 2: Indicates that the test case should be run (important test case), generally applied to functional test cases others than acceptance ones, e.g. help information available in the UI.

Priority – Best Practices

- Priority 3: Indicates that the test cases that could be executed but does not affect any important functionality of the product/feature under testing (medium importance test cases). E. g. 508 Compliance test cases
- Priority 4: Indicates that the test case that is not so important for the feature under testing but it will be nice to run it to ensure a high quality for the product (low importance test cases). E.g. Negative testing test cases.

Related PR – Best Practice

- Fill the related PR as soon as it is discovered.
- Verify the PRs related all the time during the cycle.
- Verify similar functionalities to see if the PR does not affect them.
- Verify similar PRs to see if those do not affect the functionality related to the PR.
- It should contain the PR ID and Title.

Running estimated time – Best Practice



- Running Estimated Time does not include setting up environments for the test case, just the time it takes running the steps and verifications.
- The installation test cases could consider the setup time.
- Remember this field is only an estimate, in the practice it can change.

Steps

Std 829-1998	Description	Jalasoft Test Case Core field	Description
Input specifications	Specify each input required to execute the test case. Some of the inputs will be specified by value (with tolerances where appropriate), while others, such as constant tables or transaction Files, will be specified by name. Identify all appropriate databases, Files, terminal messages, memory resident areas, and values passed by the operating system.		
	Specify all required relationships between inputs (e.g., timing).		
		Steps	List the steps you take to perform the test.

Steps – Best Practices

- Steps must be written as a command sentence (For instance, 'Write your login', 'Press Enter').
- The steps should be detailed enough so someone who is not familiarized with the application can execute the test case without any problem.
- Maintain the Test Cases steps up to date (for example, update the test cases affected by a UI change).

Steps – Best Practices

- Enumerate the steps sequentially.
- You can add sub steps or notes for each step.
- Make sure that after executing the last step, you can verify if the expected result can be reached or not.
- When designing the TC steps, always consider that other people will execute the test case

Criteria, Expected, Verification

IEEE Std 829-1998	Description	Jalasoft Test Case Core field	Description
Output specifications	Specify all of the outputs and features (e.g., response time) required of the test items. Provide the exact value (with tolerances where appropriate) for each required output or feature.	Criteria Results	Criteria to verify the result
		Expected Result	The results you expect to happen when the test is run.
		Verification	This might not always be of general knowledge, sometimes is unknown by inexperienced people. The verification helps to validate if the expected result is achieved.

Criteria Results – Best Practices

- Should be clear to apply
- Should be according with the feature that you are testing.

Expected Results

– Best Practices

- Every test case should have a specific and unique expected result.
- Expected results should not be ambiguous.
- Different sets of steps could have a common expected result.

Verification – Best Practices

- After the steps are executed, it should be verified that it involves the correct functionality of the areas that are affected.
- It should be verified that the information is communicated among related components.
- It complements the steps that require complex setting
- It also complements the steps that require some especial knowledge

Verification

– Best Practices

- It clarifies the TC steps.
- It provides additional information to achieve the expected result.
- Verify the information registered on the log
- Verify that information is saved in database

Requirements - Hardware

IEEE Std 829-1998	Description	Jalasoft Test Case Core field	Description
Environmental needs		Requirements	
Hardware	Specify the characteristics and configurations of the hardware required to execute this test case (e.g., 132 character ´ 24 line CRT).	Hardware	Hardware requirements for the test case

TC dependency

IEEE Std 829-1998	Description	Jalasoft Test Case Core field	Description
Intercase dependencies	List the identifiers of test cases that must be executed prior to this test case. Summarize the nature of the dependencies.	This feature is managed on a higher level, using the definition of cycles or environment specifications.	

Other Fields

Field	Description
ID	Some number, so it can be easily identified.
Effort	Set up time
	Execution time
Status	Pass/Fail/Blocked/Not Applicable
	Is the TC valid for this cycle?
Date concluded	Completion date
Tester	Name of the person executing the test
Owner history	

Field	Description
Test Suite / Test Cycle	Test Suite associated with. Test cases can be assigned to many different test suites.
Product version	
Product Version (execution)	
Actual Result	

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Test Case Sample

TITLE:

User account with a dash symbol “-” can login to the Configuration Console

PRIORITY:

1

DESCRIPTION:

A user with a dash symbol “-” should be able to login to the Configuration Console and access to all available views and the login is recorded in the database binnacle.

Reference: Document xxx, section 3.1, Pg. 125

REQUIREMENTS:

Setup instructions

Create a user account that includes a dash symbol with Domain Controller’s Users and Computers utility (e.g. Don-Dash) it can be a domain admin or domain user account.

STEPS:

- 1) Run Configuration Console
- 2) Wait to Login dialog box is displayed
- 3) Type the user account and password; you should Type dash symbol for user account such as Your-Account
- 4) Click OK
- 5) Configuration Console should be displayed

CRITERIA RESULTS:

Expected Result

Configuration Console should be opened successfully using the user account with a dash symbol

Verification

All Views should be displayed

- a) Left pane should have three views
- b) Right pane should have the dashboard view

Verify if a new record was added in the database binnacle. Execute the attached in the data base and verify:

- a) Verify if the user account with dash symbol “-” is displayed in the query’s result
- b) Verify if the password is not displayed as plain text. It should be encrypted

ATTACHMENTS:

Query to the binnacle attached

TEST CASE CREATION DATE:

January 25, 2009

RUNNING ESTIMATED TIME:

0.5 hours

Questions

