Tests Evolution Gadget

This gadget provides a way to see the evolution of a group of Tests in a particular version of the system by taking into account certain Test Executions.

Tests Evolution
By Xpand-IT • Local

Add gadget

Tests Evolution chart/table for showing the evolution of the Tests"
status

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  - "Final statuses have precedence over non-final statuses" checked
  - "Final statuses have precedence over non-final statuses" unchecked

Purpose

This gadget enables you to see, at a glance, the evolution/trend of the status of a group of Tests, taking into account the results of those Tests in certain Test Executions.

The calculated status (e.g., TODO, PASS, FAIL, etc.) of the Tests per day is shown.

Possible usage scenarios:

- see the progress of the calculated status of certain Tests for a specific version
- see the progress of the calculated status of certain Tests for a specific version on a specific Test Environment
- see the progress of the calculated status of Tests in a given Test Plan, taking into account the Test Executions associated with the Test Plan.

How to use

⚠️ **Please note**

The performance of this gadget will be mostly affect by the amount of Test Runs from the given Test Executions. Please use this gadget wisely.

Performance can be optimized by setting specific limits to both Test Runs and Test Executions in the Miscellaneous section of the Xray Administration.

Start by selecting the Tests and/or the Test Execution issues with:

- **Saved Filter for Tests:** a saved filter containing Test Issues
- **Saved Filter for Test Executions:** a saved filter containing Test Execution Issues

You can define one of these filters or both. If you just define the "Saved Filter for Tests", then the execution trend for those Tests will be shown, no matter in which Test Execution they were run. On the other hand, if you only define the "Saved Filter for Test Executions" then the execution trend will be shown for the Tests that are part of those Test Executions, in the scope of those Test Executions.

If both filters are defined, then the execution trend is shown just for the Tests contained within the "Saved Filter for Tests", taking into account the runs from the Test Executions identified by the "Saved Filter for Test Executions".

You can also restrict the Test Runs that will be used for the calculation of the values.

- **Date Range:** either Custom, Time frame or Planned dates from Test Executions
  - if "Custom", then you need to provide the dates of the time period:
    - **Start date** and **End date:** only the Test Runs with start date and end date between this range will be considered
  - if "Time frame", then it can be either:
    - **Current Week**
    - **Last Week**
    - **Current Month**
    - **Last Month**
    - **Last Days**

- if "Planned dates from Test Executions", then the minimum and maximum of begin and end dates, respectively, from the Test Executions are considered
- **Test Run Assignee:** the user assigned to the Test Run
  - **Current User:** option to choose dynamically the current user logged in as the selected user when sharing dashboards with others. Please note that in confluence, the current user will always be the user that owns the connection between Confluence and Jira.
- **Test Run Status:** the status of the Test Run
- **Test Environment:** the Test Environment to take into account (i.e., only consider the Test Runs from Test Executions made for this environment)

It is also possible to configure the:

- **Custom Title:** a specific title for the gadget
- **Number of results:** the number of results per page
- **Refresh Interval:** how often the gadget is updated

Tests Evolution   ⊕ ⋯

Custom Title: [   ]
☐ Use a custom title

Test Filter   **All Tests**
[   ]
Advanced Search   Clear

Test Execution Filter   **Calc Test Executions for v3.0**
[   ]
Advanced Search   Clear

Date range: [Custom   ▾]
Start date:
[2018-12-01]
End date:
[2018-12-19]

Test Run Assignee: **No User selected**
[Quick Find]
Clear
Start typing to get a list of possible matches of existing Test Run Assignees

Test Run Status: [All   ▾]
Choose the Test Run Status

Number of results: [10]
Number of results to display

Refresh Interval: [Never   ▾]
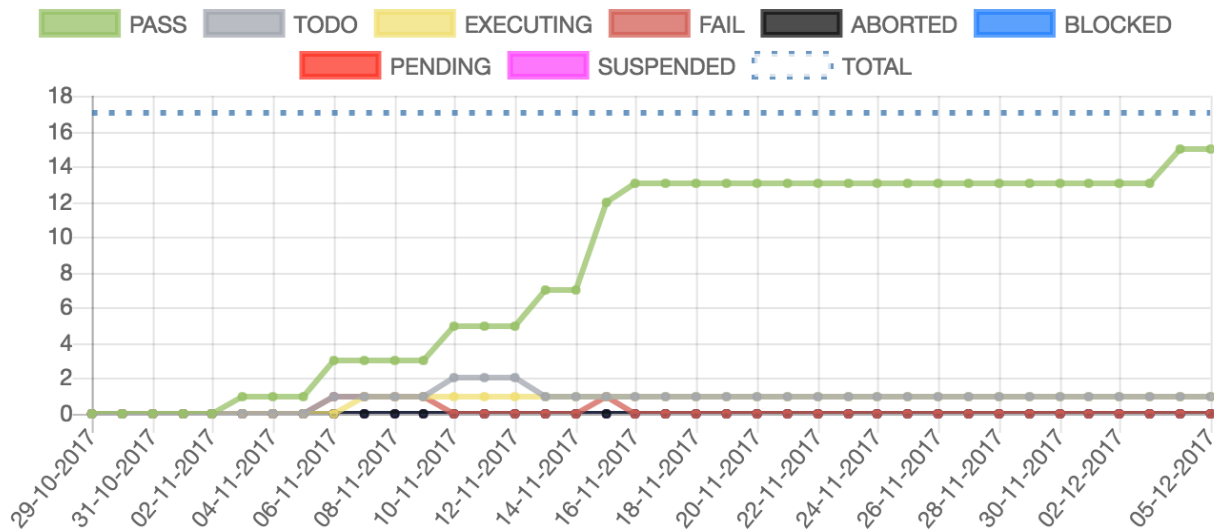How often you would like this gadget to update

[Save]

ⓘ **Please note**

Please note that only the selected/filtered Test Runs from the given Test Executions are taken into account in the calculation of the status of the Tests for any given moment in time.

This means that only those Test Runs are considered. If, for example, some Test was PASS (because you already had executed it somewhere in the past and the latest status of it was PASS) but you're only taking into account some more recent runs, then it will start by showing as TODO at the start of the chart.

Tests Evolution: Sample Tests Evolution chart

Show as Table

PASS TODO EXECUTING FAIL ABORTED BLOCKED
PENDING SUSPENDED TOTAL

Tests Evolution: Sample Tests Evolution chart

Show as Chart

	PASS	TODO	EXECUTING	FAIL	ABORTED	BLOCKED	PENDING	SUSPENDED
29-10-2017	0	0	0	0	0	0	0	0
30-10-2017	0	0	0	0	0	0	0	0
31-10-2017	0	0	0	0	0	0	0	0
01-11-2017	0	0	0	0	0	0	0	0
02-11-2017	0	0	0	0	0	0	0	0

Showing 1 to 5 of 38 entries   First Previous 1 2 3 4 5 Next Last

How it works

Calculations are based on the historical changes for the Test Runs being considered. Note that for a given Test Run you may or not change the Test Run statuses several times; this gadget will consider it.

It also takes into account the **Final statuses have precedence over non-final statuses** setting, which is available under **Manage Test Statuses** in the Xray settings.

General rules for the calculation of the status for a given day

- Changes made over time to the status of a Test Run will be reflected in the calculated status for that Test (regardless of whether it's a final or a non-final status).
- A status will persist (i.e., valid) from the moment it has been recorded until the next status change in that Test Run or in another Test Run.
- The **Started on** or the **Finished on** dates of the Test Runs are not taken into account.
- Test Runs are only created when you start executing them; therefore, if you create a Test Execution and don't execute the corresponding runs, then you won't see them being reflected in this gadget.

"Final statuses have precedence over non-final statuses" checked

Scenario	Yesterday	Today 10am	Today 11am	
1	TR1	TR1	-	**Test Run**
	PASS	TODO	-	**status change made in that day**
	PASS	TODO		**calculated Test status for that day**
2	TR1	TR1	TR1	**Test Run**
	PASS	FAIL	TODO	**status change made in that day**
	PASS	TODO		**calculated Test status for that day**
3	TR1	TR2	-	**Test Run**
	PASS	TODO	-	**status change made in that day**
	PASS	PASS		**calculated Test status for that day**
4	TR1	TR2		**Test Run**
	PASS	FAIL		**status change made in that day**
	PASS	FAIL		**calculated Test status for that day**
5	-	TR1		**Test Run**
	-	PASS		**status change made in that day**
	-	PASS		**calculated Test status for that day**

"Final statuses have precedence over non-final statuses" unchecked

In this case, all statuses are considered independent of whether they are final or not. The key differentiator is that latest test run is always considered, just by taking into account the creation date.

Scenario	Yesterday	Today 10am	Today 11am	
1	TR1	TR1	TR1	**Test Run**
	PASS	FAIL	TODO	**status change made in that day**
	PASS	TODO		**calculated Test status for that day**
2	TR1	TR2	TR2	**Test Run**
	PASS	FAIL	TODO	**status change made in that day**
	PASS	TODO		**calculated Test status for that day**
3	-	TR1	TR2	**Test Run**
	-	FAIL	PASS	**status change made in that day**
	-	PASS		**calculated Test status for that day**
4	TR1	TR2	-	**Test Run**
	TODO	PASS	-	**status change made in that day**
	TODO	PASS		**calculated Test status for that day**