

# QA X-Ray Alternatives, Best Practices

## CRITERIA

1. Ability to reuse the same test case template across multiple browsers, operating systems, software versions without having to maintain multiple copies
2. Ability to capture test run results separately from test case templates
3. Ability to integrate with Jira so that test cases could continue to be linked with Dev feature, improvement and bug tickets
4. Supports various ways of analyzing/reporting on test results, including but not limited to:
  - a. analyzing test results over time as one means of helping QA prioritize test efforts
5. Ability to capture (save, update) test results for both manual and automated tests
6. Ability to automatically create new test case templates from test automation, if a test template does not already exist
7. Ability to integrate with existing test automation frameworks including Selenium, JUnit and NUnit.

## Other factors:

- do not suggest widescale changes
- make suggestions that will only add value and describe value to team
- can make suggestions for best practices (i.e., don't talk about what was done in the past)
  - e.g., keeping Test Executions the same for apples-to-apples comparison, making categories, how to aggregate up into "bigger"/broader e.g., POS as opposed to keeping categories like POS Compliance

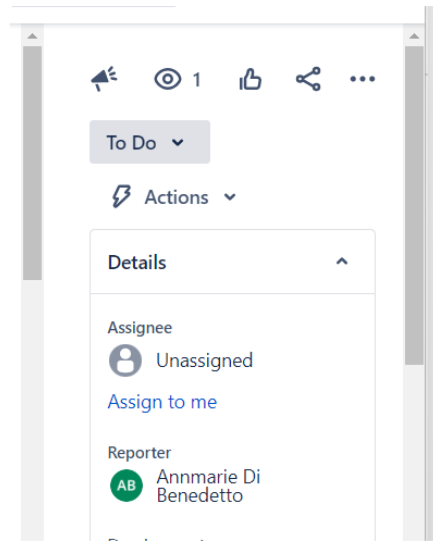
## ALTERNATIVES

### I looked at:

- Zephyr Scale (test case writing only)
- Zephyr Enterprise
- TestRail (about 4x more expensive on a per-user license), does have API
- testmo
- PractiTest (about 5x more expensive on a per-user license), does have API

### X-Ray Best Practices:

- Create a Test Plan and/or Test Execution to track testing effort:
  - note: there is a change: Test Executions do not use Test Case Status –



Test Case Details (upper right)

but rather has its own Test Run Status:

Test details

Test details Preconditions Test Sets Test Plans Test Runs

Execute in

Filters

10 Columns

Key	Summary	Fix versions	Revision	Status	Actions
<input type="checkbox"/> QAE-9812	FLY 1.4 SysAdmin Regression			EXECUTING	...
<input type="checkbox"/> QAE-9444	WebApps Manual Tests for 1.1 Initial Beta Site	1.1		PASSED	...
<input type="checkbox"/> QAE-9067	SysAdmin 1.0 Manual Test Execution			FAILED	...

Prev 1 Next

Total 3 issues

Test Runs section within Test Case

Differences:

- Test Plan is 1:many relationship with Test Executions (could be like “all 1.4 Regression” or “1.4-related testing”)
- Test Execution is a 1:many relationship with Test Runs
- Ideally, Test Executions are a relatively small area e.g., POS Compliance
  - **Categories** like:
    - HL7
    - Patient Tracking
    - POS Compliance
    - POS PatientSearch
    - POS Printing
    - POS Items and Macros
    - POS Display and Search
    - POS Order Creation
    - POS Nutrients (and Misc)
    - POS Ordering and Order Plans
    - Printing
    - Reporting [Framework] (no content)

- Reports
- SysAdmin
- TrayTracker
- Tray Managing API
- Wizard/Webapps (\* worth it to break out into Customer Center, Reporting, Wizard?)
- Test Executions: record defects here:

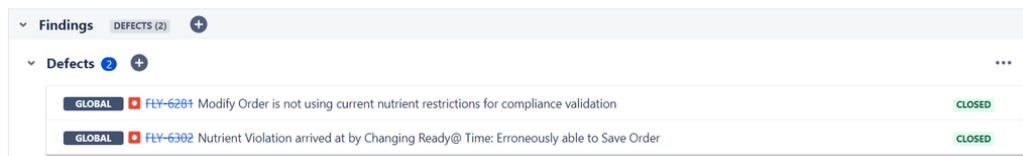


(Press triangle “Play” button for tests in To Do or flying rectangle button for Passed/Failed)

#### Question for group:

- should this be New Defects only or Existing defects? (group said existing defects)

Expand Findings:



Some changes:

- In past, we created Filters to get some set of tests, then put the right gadget on it (usually Issue Statistics)
- Now:
  - need to create 1 filter to get the set of tests (no change)
  - use filter to add tests test to Test Execution
  - create a filter for the Test Execution
  - Use the Test Execution List (compact horizontal bar chart) or Test Runs Summary (vertical bar chart)
  - Unfortunately, if tests are removed from the first filter, they need to be removed from the Test Execution (which is a bit of duplication).

#### Test Repository

- ~~Organization of tests~~
  - ~~can lead to duplication of tests~~
  - ~~need to maintain the repository separate of filter (so if you change the filter, you also need to change Test Repository)~~

X-Ray:

- can upload test runs/execution results to Jira: need Jira administrator to grant an API key to do this (Clarissa has done this ~1 year ago)

#### Reporting

- For comparison version-over-version: Test Executions List (need to create a filter with Test Executions)
  - need to maintain good filters and test executions
- For Details: Test Runs List (needs association with Test Plan-> Test Executions → Test Runs)
  - includes linked defects open, closed, status
  - this is preferable to Tests List (since we are going to move to Test Runs)
- if we're interested in “what tests were added from one release to another and what the statuses were,” (test runs comparisons release-over-release) – could write a pivot chart listing all test cases in left-most column

- We are also interested in (from a project management perspective) flow, i.e., reports on tests passed, failed, etc. e.g., on a week-to-week or month-to-month basis

#### ACTION ITEMS:

- discuss categories
  - Do we need a new Category field or custom field?
- how to categorize for Web Ordering?
- follow up with Kim
- look at reports for flow.