**Best Test management tools**

As a software testing company deploying the right test management tool in the quality analysis and quality control domain is very much necessary. The meaning of the mention right here is the tool that best fits the need.

We would strongly recommend that don’t ever prefer to look for something best, because there is no such thing exists in the industry. Everything designed to good job in a few areas but unfortunately not all due to its design implementations. Hence looking for something that best servers the purpose of our need

While we are aware that any tool that serves the single purpose, a commercial one can do a way better job in its surveillance but the industry may not prefer them all the time as the organization look into the below details

* Multipurpose tool usage can be of help in a managing multitasks
* The tool that is going to be used should be cost effective and should be of no cost if the company doesn’t want to invest.

To comment on the purpose of our blog here, test management tool is a one which helps us to manage the test activities in the STLC lifecycle. Thanks to these tools as these are pretty much helping us in tracing our needs. The industry has taken whole leap in migrating from an excel works books to these tools with increasing the needs and considering the fact that the team sizes are growing.

**Functions of a Test management tool**

1. Creation of test plans and strategy documents
2. Creation, edit , deletion of test cases
3. Test execution in different environments with the help of tool
4. Linking of test cases and bugs and tweaking their status
5. Producing the charts and meaningful tabular forms for data projection
6. Integrate with the VCS and CI/CD tools

There are plethora of tools available in the market which does the operations that were aforementioned. Not all tools have the capability to serve all the purposes, hence we should take a call by knowing our actual need.

**Benchmark to rank test management tool:-**

Before we hop into the tools and rate them its adequate to understand the criteria and critical parameters which are helping us to scale them to be top.

**Integration with project management tool**

We must know the fact that any test management tool can’t serve its intended purpose without being integrated with a project management or change management system. The best known tools that are widely used in the market are jira, HP ALM..etc. as we know that JIRA is one of the system which is used mostly in the industry , we consider the fact that integration matters. This helps us right from the tracking of the requirements to the documenting the scenarios writing of test cases, managing defects and projecting reports to share with stakeholders

**Automation frameworks support**

In order to run the automated test cases and produce reports right after execution we must have the tool support this as well. Given the importance and increasing need for automation this has become the minimum need for any software testing organization to consider this

**BDD test case development tool support**

In the recent era of automation just to make the tests more meaningful and also to ensure the test cases are understood by non-technical person industry is moving towards the behavior driven development model to design automated tests. Having the test management tool supports the support of this gherkin, behave, cucumber, specflow..etc, integration will reduce the rewriting the test case by automation engineers.

**Integration with CI/CD**

With the emerge of continuous integration and deployment industries are fairly taking the advantage of the devOps and planning frequent builds and test executions. Hence integration of test management tool with VCS and CI/CD systems is also key measurement.

**Powerful dashboards**

When it comes to the point of test status, reports and results are something that everybody interested at. The test management tool must be able to help us by providing the best in class dashboards and reports and results. The tool should also help us to export every data in the form an excel, csv workbooks for better review and reference.

After considered all the aforementioned parameters, upon a thorough research come up with the below top 5 test management tools as they provide extensive support of things discussed and also their usage is so broader.

**Xray**

This is add on tool to JIRA, albeit it’s not used as much as zephyr but still we would like to bring this top due to the following features.

* configuration management – to integrate with JIRA existing project, or create a new separate project
* Test design - create, edit, cloning and deletion of test cases are possible

**Automation support**

it supports many automation frameworks also it has editor to support the gherkin language, so that the feature, spec files can easily be written

**CI/CD integration**

It can well gel up with the CI/CD tools such as Jenkins, team city, bamboos and also supports the integration of VCS system such as github, SVN, bit bucket

**Built in REST API to offering**

It exposes the built in APIs to automate some of the tasks such as attaching test cases, updating test cases, and adding attachments .etc

**Test Rail**

Test rail is powerful as it performs most of the tasks that are performed by Xray. We don’t see many limitations with this tool, the only difficulty is its not that easy to interface and test case creation would be slight difficult and no requirement management capability.

**zephyr**

While this performs the most of the actions as that of Xray and is being widely used by community but still holds the second rank because it has no support for the following actions.

* Can’t be integrated with CI/CD
* No automation support
* Test cases versioning and support for environments is not present

**Practitest**

This indeed works well, supports most of the needs that a manual test team looks for. It has subtle limitations in terms of automation where Automation integration and API access not available on the introductory plan

**Qtest**

This is a tricentis tool, which is a full featured enterprise tool with user friendly interface. It facilitates us with decent dashboards and allows us to integrate with the automation frameworks. This can even be integrated with the CI/CD tool. But this is more for smaller teams

**klaros test mnanagement**

this is the tool among all of these which is coming from open source category, the tool has extended enterprise library too. It is a hosted on a cloud platform and it generates meaningful dashboards. This supports the integration with automation tools such as selenium and UFT, jmeter. It also supports integration with the VCS and CI/CD systems.

**Conclusion**

The tools were listed in a chronological order of their ranks, one thing that must be noted that the selection of tool and rating it dependents on the need and purpose. But the above tools were rated by considering the common industry needs.

Happy learning.. ☺