ALM BENCHMARK

THE ALM IN FEW WORDS

Test management tools are essential for the tester and for quality monitoring. Most of these tools allow you to :

- Manage and organise software requirements
- Manage a test directory
- Manage and execute test campaigns
- Manage bugs (most often "missing" functionality)
- Ensure links between the elements mentioned above
- Propose reports

Like most 'sectors' there are dominant tools. Until a few years ago it was HP ALM (bought by Microfocus), nowadays the most frequent is the JIRA plugin: XRay. However, there is a wide variety of ALMs and the most popular tool is not necessarily the one that best suits your context.

Aware of these problems, many testers and companies are wondering which tool to choose. Unfortunately this choice, like any other tool choice, can be complex and a market study is often necessary.

At QESTIT we have also done this and have come up with results that we share with you in this article.
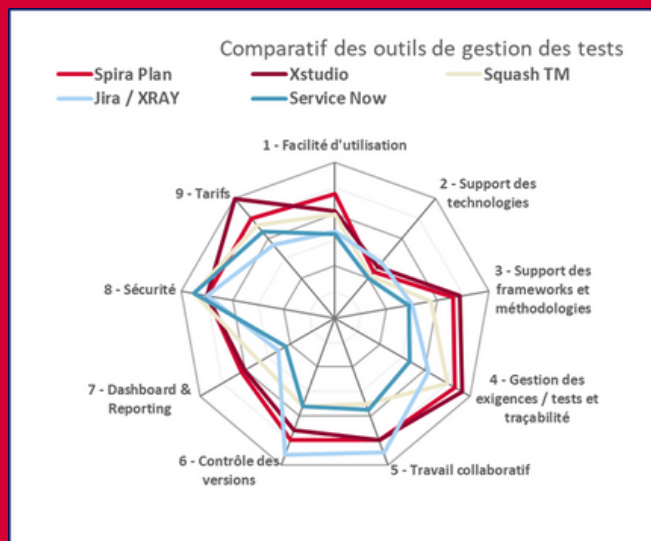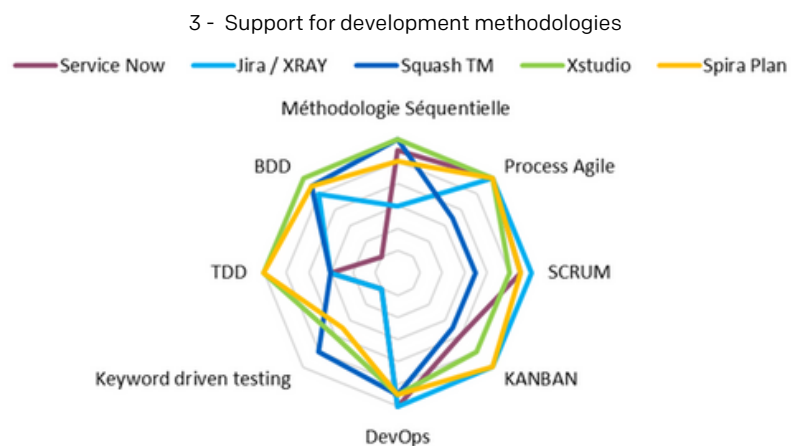
OUR APPROACH AND OVERALL RESULTS

ALMs are complex tools with many features. Beyond a simple score, we felt it was important to compare these tools according to 9 criteria. Each of these criteria is made up of sub-criteria rated between 1 indicating a very poor or non-existent ability of the tool to meet this criterion and 5 indicating a very good ability of the tool to meet this criterion.

The score of the criterion is the average of the scores of its sub-criteria. Depending on the needs, it is always possible to weight the criteria, modify the sub-criteria or even create or delete them. It is also essential to keep the scores up to date with new versions of the various tools.
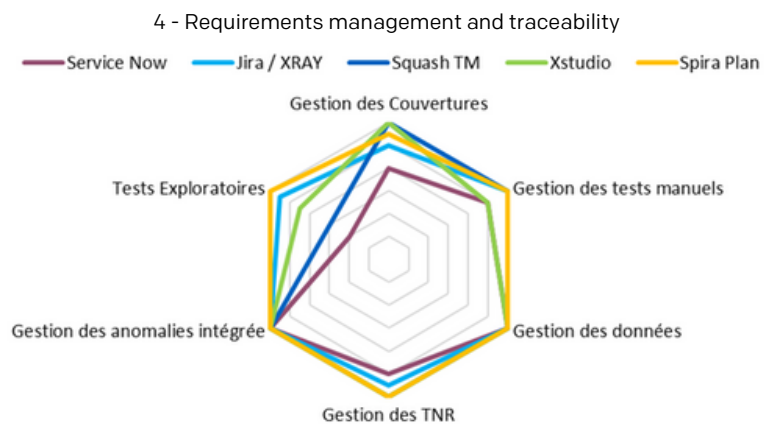
In the end, after our study of 5 ALMs on the market, we arrive at the result above. As these results are general and not necessarily very easy to read, we feel it is important to go into more detail and present the different sub-criteria evaluated in detail.

Comparatif des outils de gestion des tests

DETAILED RESULTS

These criteria and sub-criteria accompanied our assessments for the 5 different ALMs in our study:

Ease of use

- Does the tool provide clear documentation?
- Is the tool easy to install and configure?
- Does the tool allow a quick start for a novice?
- Is the tool kept up to date by its developers / publisher?
- Is the support for the tool good?
- Is the tool stable?
- Is the tool user-friendly?

1 - Ease of use

Technology support

- Does the tool allow you to manage test automation?
- Does the tool allow for interfacing through exchange APIs?
- Does the tool support, at least, Jenkins, Gitlab?
- Does the tool communicate with Gitlab?
- Does the tool communicate with Mantis?

2 - Technology support

Support for development methodologies

- Does the tool support traditional cycles?
- Does the tool support Agile processes?
- Is the tool compatible with the SCRUM framework?
- Is the tool compatible with the KANBAN framework?
- Is the tool compatible with the DevOps culture?
- Does the tool support Keyword driven testing?
- Does the tool support TDD or even BDD?
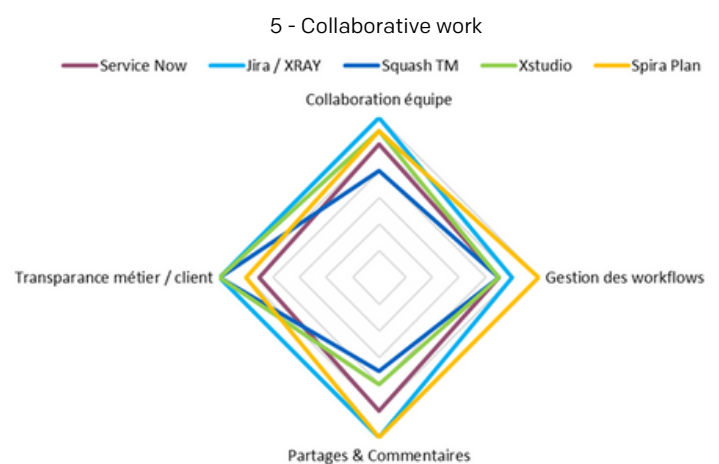

3 - Support for development methodologies

Requirements management and traceability

- Does the tool manage the coverage of requirements / user stories?
- Does the tool allow for the management of manual tests?
- Does the tool allow good management of test data?
- Does the tool allow the management of regression tests?
- Does the tool allow for the management of anomalies?
- Does the tool allow for the management of exploratory tests?

4 - Requirements management and traceability

Legend: Service Now, Jira / XRAY, Squash TM, Xstudio, Spira Plan

Radar chart axes: Gestion des Couvertures, Gestion des tests manuels, Gestion des données, Gestion des TNR, Gestion des anomalies intégrée, Tests Exploratoires
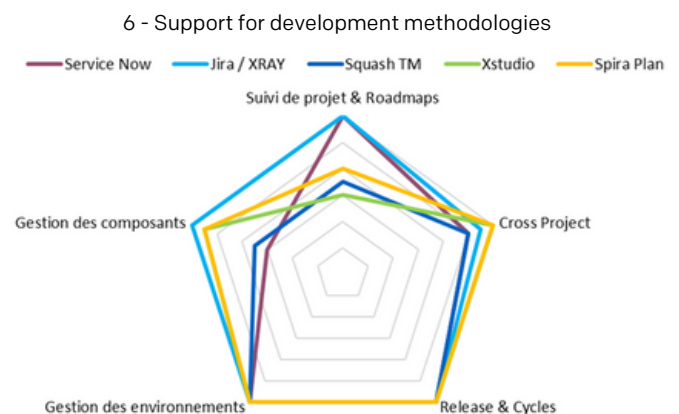
Collaborative work

- Does the tool facilitate team collaboration?
- Does the tool allow for workflow management?
- Does the tool facilitate sharing and communication?
- Does the tool provide transparency for the business?

5 - Collaborative work

Legend: Service Now, Jira / XRAY, Squash TM, Xstudio, Spira Plan

Radar chart axes: Collaboration équipe, Gestion des workflows, Partages & Commentaires, Transparance métier / client
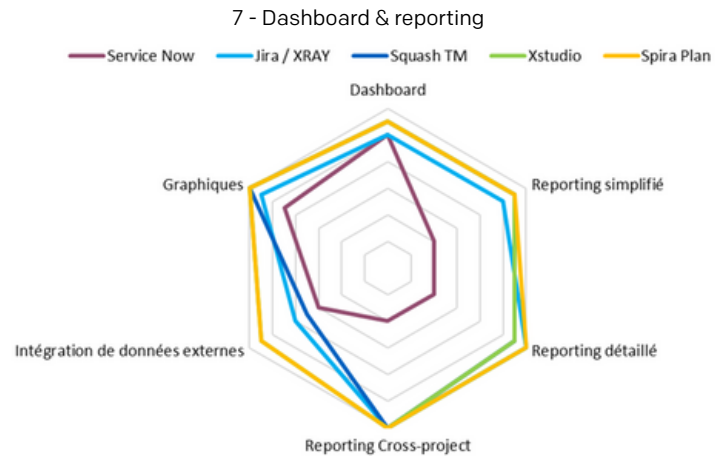
Support for development methodologies

- Does the tool allow monitoring of the activity using a dashboard?
- Does the tool offer satisfactory simplified reporting?
- Does the tool offer satisfactory detailed reporting?
- Does the tool offer satisfactory cross-project reporting?
- Does the tool allow the integration of external data (auto / perf tests…)
- Does the tool provide good quality graphics?

6 - Support for development methodologies

Legend: Service Now, Jira / XRAY, Squash TM, Xstudio, Spira Plan

Radar chart axes: Suivi de projet & Roadmaps, Cross Project, Release & Cycles, Gestion des environnements, Gestion des composants

Reporting

- Does the tool allow to follow the activity with a dashboard?
- Does the tool offer satisfactory simplified reporting?
- Does the tool offer satisfactory detailed reporting?
- Does the tool offer satisfactory cross-project reporting?
- Does the tool allow the integration of external data (auto / perf tests…)
- Does the tool offer quality graphics?

7 - Dashboard & reporting

Security

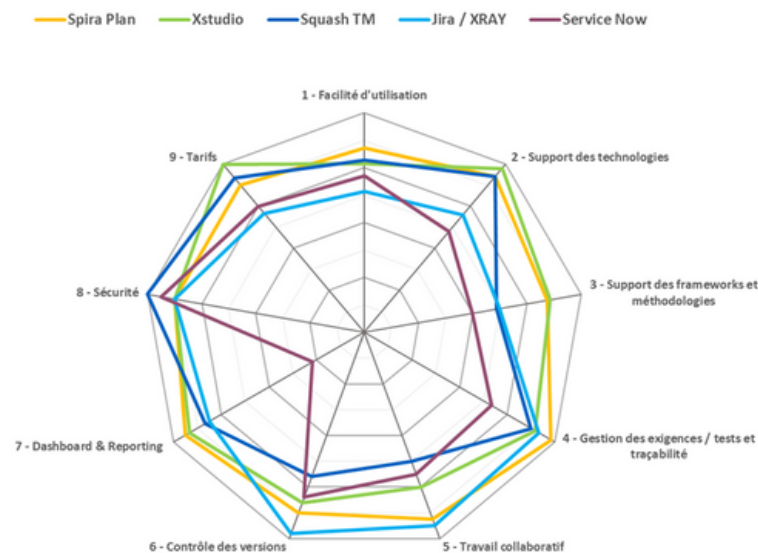| Critères SaaS / Cloud à respecter	XQUAL	spiraPlan	Jira Software / XRAY	squash	servicenow
Chiffrement SSL / TLS	✅	✅	✅	✅	✅
Identification, Authentification SAML / OAuth	➖ Gestion SAML2 en mars 2023	✅	➖ Plugin ou Atlassian connect en +	✅	✅
Hébergement mutualisés?	✅	✅	✅	✅	✅
Prestataire Européen?	❌ Hébergement cloud AWS	❌ Hébergement cloud AWS	❌ Hébergement cloud AWS	✅ Scaleway / OVHcloud	❌
Données hébergées en Europe?	✅ Datacenters à Paris	✅	✅	✅ Hébergement en France	✅
Gestion de sortie de service?	✅ Weekly backup géré par Xqual	✅	✅	✅ plan de reprise d'activité (PRA)	✅
Expertise interne?	✅	✅	✅	✅	✅
Notifications avancées?	✅	✅	✅	✅	✅
Traçabilité?	✅	✅	✅	✅	✅
Politique de sécurité?	➖ Pas d'audits réalisés	➖ Pas d'audits réalisés	➖ Pas d'audits réalisés	✅	✅
Portabilité des données?	✅	✅	✅	✅	✅
Minimisation des données?	✅	✅	✅	✅	✅
Certification ISO27001	✅	✅	✅	✅	✅
Autres Certifications?	➖	✅	✅	✅	✅

Pricing

- Unit price of a licence: what is the cost of the tool?
- Hidden costs: is the price displayed the one we really have to pay to work correctly with the tool?
- Support and maintenance: reactivity of the support team to help us out, solve anomalies or implement new functionalities on demand

9 - Pricing

Overall scores :

Comparison of management tools

— Spira Plan — Xstudio — Squash TM — Jira / XRAY — Service Now

CONCLUSION

The ALMs evaluated in our study are : Spira, XStudio, SquashTM , XRay, Service Now. We analysed and manipulated all of these tools in order to score each of the different criteria and sub-criteria presented.

Our approach has been designed, tested and improved throughout this work. It is now very easy to add other tools to this study such as Zephyr, TestRail or any other ALM. Similarly, the scores we have given are not necessarily those you would give in your context.

The methodology used has the merit of being flexible both in terms of evaluation and weighting. Its only real "need" is to be up to date with the latest version of the ALM. The older the version evaluated, the less representative the scores and comparisons with other ALMs.

If you would like to know more, please contact us at adn@acial.fr, mhc@acial.fr, niu@acial.fr or mko@acial.fr