

Choosing the right tool for Application Lifecycle Management

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Overview








Choosing the right ALM (application lifecycle management) tool can be a complex task. Working with one tool that manages the complete application lifecycle, requires the consent of all development departments, such as product managers, development team, QA and also the senior management.













This article emphasizes the important factors one should take before selecting such a tool.

Legend

-  Critical
-  Medium
-  Not critical

Subject	Description		Orcanos QPack
Choose the right provider			
Area of expertise	Your provider expertise in the application lifecycle domain.		Orcanos expertise in application lifecycle management
Existing customers	What type of the customers using the company solution (startups, medium enterprises, big Enterprises)? Customers Diversity reflects on product flexibility to provide solution for multiple domains.		Orcanos serves a range of companies that operate in diverse industries, such as software, hardware and medical device, both SME and big enterprises
Support	What kind of support does the company provide (Forum, online, manned support)		Check orcanos support means at: Orcanos Support
Reference Customers	Get reference from customers that match the type and size of your company		See Orcanos customer testimonials
Pricing model	Check all licensing issues and make sure they fit your organization budget, existing headcount and optional future expansion. Pricing models might include Server license, named user license, license per seat, floating and fix license, monthly subscription, payment per		QPack operates simple licensing model: annual subscription (includes maintenance) and perpetual license purchase (optional annual maintenance).

Subject	Description		Orcanos QPack
	<p>project, annual maintenance, modules pricing, remote connection licensing and more.</p> <p>Verify that annual maintenance and support include new releases, upgrades, bug fixes, phone support, etc.</p>		<p>Annual maintenance includes new releases, upgrades and support.</p> <p>Orcanos pricing</p> <p>Orcanos support</p>
Professional services	Does your provider provide professional services such as data import, integration to existing legacy systems, training and implementation services?		Orcanos provides professional service submitted to customer needs.
Choose the right time	<p>Does your organization ready to implement an organizational tool?</p> <p>Senior management should be involved with such a process.</p>		
Releases time intervals	<p>How often does your provider release new versions?</p> <p>How fast does he provide patches and bug fixes?</p>		QPack releases 1-2 major releases a year, 2-4 minor releases and on going patches
Usability aspects			
Ease of use	Make sure the tool is as easy to use as possible in order to avoid employees resistance and produce most benefits in less time		QPack simple and friendly interface reduce users resistance and allows working right from first day!
Learning curve	<p>How easy it is to implement the system?</p> <p>How much time it takes for an average user to get familiar with the system?</p>		Basic understanding and Operating QPack takes no more than few hours
Rich editor (better use HTML editor)	Editor should provide you with most editing capabilities such as bold, italic, underline, images, tables, speller, indentation, fonts, numbering, colors, HTML links, search & replace, printing option, zoom, etc.		<p>QPack allows working with rich HTML editor, allows adding images, tables, etc.</p> <p>QPack also contains embedded MS- Word editor</p>
User personalization	User should be able to setup his own environment, such as layouts, grids, default pages, custom filters, etc.		User settings combined with user dashboard allows user to define his environment based on his needs.
Project management			























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Multiple project	Does the system support management of multiple projects and versions.		QPack unique versions mechanism allows collaborative work with multiple projects and versions easily
Complicated projects/products (solution)	If you manage complicated solutions that are combined of multiple projects/components with different versions, developed by different groups but provide one integrated solution – you might need your system to support such architecture.		QPack allows working with solution (one solution may consist of multiple projects and versions.
Action items	Manage general tasks not related to development process.		QPack action items module provides general and atomic issues management
Content and versions	Management of multiple versions, delta between versions, easily change the version you are working on, reports per versions, make sure no duplication of data is done when advancing version, manage pool of future features, change versions of features, easily manage release and change requests to that release, release approval support, etc.		QPack provides unique versions engine that allows easily and transparently work on multiple versions. QPack requirements and change requests pool allows defining and tracking future versions, control version content changes easily.
Change management	Manage on going changes, change requests, implement and test them, produce reports and measure changes effects on your product quality, trace changes per release, implement them easily to product defer feature implementation, etc.		
Effort estimation	Allow management of effort estimation for each item (requirement, test, bug, task, etc.)		
Product/project requirements			
Define High level, low level requirements, all types of requirements (functional, regulation, safety, etc.)			
Allow build product tree in hierarchical view	A flat view is Ok too, but hierarchical view is better for traceability and		

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	understanding product structure		
Manage requirement properties	Status, priority, assignment, status, custom fields, etc.		
Coverage of requirements by tests, tasks, and defects			
Approval process	Submitted to predefined workflow, with automatic assignments upon status change, workflow permissions and email notification		
Requirements input	Easily add requirements, rich text/HGTMl editor, including images, tables, etc.		
Full traceability	Trace from market requirements to product requirements, to test coverage, test results, defects, etc.		
Office integration	Allow export data to MS-Word/Excel, import data from MS-Word/Excel, manage regulation based documents, manage exported document properties, embed filters in the generated document, etc.		
Manage relationships between requirements			
Development tasks			
Detailed design per each requirement			
Tasks per each requirement			
Tasks and detailed design workflow			
<u>Test plan</u>			
Plan tests based on requirements	Make sure that each test covers requirement. It is better to have automatic coverage (for example, using hierarchic tree).		
Test description	Allow user to add test description, used by tester later on.		
Test steps	Make sure user can break test to separated steps, for each step manage description and expected results – used later when tester runs the tests		

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Copy steps from test to test	Allow duplicate steps within test and between tests		
Duplicate tests	Allow copy of tests, Including steps, also between projects and within project		
Relink tests	Ability to move tests between tree nodes.		
Create test folders	Allow creating folders to manage collection of tests		
Test parameters	<p>Manage parameters for test steps (for example, for testing browser – create one test and use parameter instead of creating test for each browser)</p> <p>Make sure you can create all possible combinations</p> <p>Select which combinations to run (better on design phase, and not in execution)</p> <p>Decide on test parameters values both in design time and during test run</p>		
Sorting	Allow sorting by alphabetic order/user custom order.		
<u>Test execution</u>			
Execution sets	Create collection of tests under specific execution set, allow test to be connected to more than one execution set.		
Execution sets level	Allow plan execution sets on solution/project/module/requirement level		
Assignment of tests in execution	<p>Allow assignment to different users in same execution.</p> <p>User can only run tests assigned to him</p>		
Add/remove tests to/from execution set	Allow creation execution set Use tree, filters		
Run test	<p>Allow user to run tests manually, pass and fail tests on steps level, run single test/group of tests.</p> <p>User should be able to see test description, steps data and attachments of test during run.</p> <p>Allow report actual results for each step tested.</p>		

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Pass/fail/skip step	For each step allow pass/fail/skip		
Run from last position	When test stops and not completed – allow to run test from last position		
Report defect from test	Allow report defect during test run. The defect is connected to the test. Include test details in defect to reduce communication drawbacks between development and QA.		
Automatic test tools integration	Allow running automatic testing tools, report test results to the system		Partial – QPack allows to operate automatic tests using batch files, and record results using web service
Run history	Track test run results, use filter to view results per user/version/execution set/run/test case, dates, etc.		
Test cycles	Manage each test cycle and allow filtering by cycle, allow run tests in cycle only once., allow reset cycle, create new cycles, etc. Allow multiple run of each execution set using cycles.		Partial
Duplicate execution set	Allow duplicate execution set within project and between projects		
Run test from existing test			Not exist
Use test run parameters such as environment configuration			
<u>Defect tracking</u>			
Defect properties	Manage all relevant properties – assignment, priority, status (including workflow), severity, found/fix/target version, solution, work around, comments, steps to reproduce, etc.		
Convert bug to test	Allow convert defect to test using its steps to reproduce in order to increase coverage matrix		
Editor	See rich editor item		
Attachments	Allow add attachment to defect		
Steps to reproduce	Table of steps to reproduce to provide developer with more data		
Workflow	Manage stats workflow with auto		

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	assignment and automatic notifications		
Relink defect			
Copy defect			
Add comments to defect description			
<u>Filters and reports</u>			
Reports			
User defined filters			
Search options	How easy it is to search items in the system		
Coverage & traceability	Full coverage of each phase in the process – market requirements, product re requirements, coverage by tests, tasks, defects, coverage for each version, etc.		
Create and save filters	Private/public		
Create charts and graphs	Can user select chart/grid view of data and save results to his personal dashboard		
3rd party integration			
Export	Word/excel/html		
Import data from other systems			Using QPack API
Export entire project data			
Source control integration			Partial
API	Allow add/edit/del/get data		
General and utilities			
Attachments management	Add/open/del attachments per each item		
Generate word documents	Submitted to predefined templates, manage multiple templates, execution time should be low, support multiple versions of MS Word.		
Custom fields for each item	Define list of custom fields from multiple types- text, list, multi select, checkbox, etc.		

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Recycle bin	Delete/restore items		
Integration to Office tools, allow import and sync with Word documents	The ability to integrate into standard MS-Office tools to allow end users to work from the MS-Office tool and sync information back to the system.		
Administration			
User profiles	Permissions, also on workflow		
Item type templates	Define unique template for each item type (requirement, test, defects...) per project		
Project administration	Users and groups definition, templates, custom fields management		
Mandatory fields			
Infrastructure, environment and technology			
Installation	How easy it is to install the system, what is the level of involvement required from IT		QPack provides one setup executable
Central repository	Is the solution operates over one central repository		
Upgrades	Are upgrades automatic, what is the level of involvement required from IT.		QPack upgrade allows upgrading in one click
Database	What is DB size support, DB type, performance, licensing		QPack operates over MSDE – SQLSERVER free edition
Operating system	What OS is required		Server – Win2000 server/Win2003 server Client – All Windows editions from Win2000
Maintenance	Daily backups, administration overhead, daily tasks such as new users creation, etc.		Daily backup is easy – one backup for FTP folder, one backup for database.
Collaboration			
Network	Does solution internet based or Intranet		QPack operates on Intranet and required VPN to work from remote sites
Email notifications	Does system generates email notifications, what is the level of		



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	notifications administration		
Data integrity	Does system supports multi users work, allows logical lock of records, etc.	