Polarion ALM unified solution

Unifying application lifecycle management functions to enhance collaboration, transparency and traceability

Summary
In legacy software development environments, different point solutions are often used to manage application lifecycles. As a result, disparate silos of development information can adversely affect collaboration, transparency, data integrity and your company’s ability to drive innovation.

Benefits
- Enhances collaboration for greater transparency
- Supports traceability and versioning requirements for regulatory compliance
- Helps significantly cut cost of ownership
- Reduces risks through audits and quality monitoring
- Leverages open APIs for custom extensions
- Reduces overall costs and increases quality

Features
- Unified data repository
- Browser-based with 24/7 portal or cloud-based network access
- Extensive requirements management options
- Extensive support for various workflow methodologies
- Built-in ReqIF functionality and online authoring/editing
- Supports test management for quality assurance

Polarion ALM software can help you consolidate your real-time management information and drive project transparency. By using Polarion ALM, you can synchronize information exchange and testing while giving your development teams the ability to more quickly and accurately respond to new business opportunities and customer demands.

Unifying data
Polarion ALM allows you to unify data on a secure platform that uses the latest web technologies. You can deploy the software on a physical and/or virtual single server or cluster of servers. The software allows you to start small with the option to easily and affordably scale the solution to meet your needs.

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Managing requirements
Requirements management includes documenting, analyzing, tracing and prioritizing requirements with a process to control and communicate changes to your stakeholders. By using Polarion ALM, your document-oriented domain experts and project team members can collaborate using familiar Microsoft® Word and Excel® spreadsheet software to create and edit requirements. After importing the information into Polarion ALM, you can use Polarion LiveDoc™ Round-trip for Word and/or Excel to collaborate with participants who use those formats. The software also includes built-in Requirements Interchange Format™ (ReqIF) functionality that allows you to provide lossless requirements exchange with your customers and suppliers.

Testing for quality assurance
Quality assurance includes the process of testing for preventing errors and faults. By using Polarion ALM, you can create quality assurance test cases and map them back to your requirements. After establishing the test cases, you can plan manual and automated test runs, using third-party test automation tools as needed, and report the results to your project members. Quality assurance and testing processes can help you reduce costs and improve overall quality.

Addressing risk management
Polarion ALM software includes built-in project templates with capabilities that help you manage potential risks following the standard failure modes and effects analysis (FMEA) approach. The software also gives you the flexibility to create and adapt custom workflows to meet your specific needs.

Customizing project planning
With Polarion ALM, you have access to a number of preconfigured and fully customizable project templates including options for project and iteration scheduling. The software helps you provide automatic project updates, showing potential delays and workload scenarios in real time.

Implementing workflow-driven change management
Efficient workflow-driven change management can help you ensure that no critical steps are missed or bypassed in your application development process.
Polarion ALM gives you out-of-the-box project templates with preconfigured workflows to help you automate your processes and use a central repository for all relevant data. The software supports standard environments, such as Agile/Lean, traditional and hybrid, and custom environments including: Feature Driven Development (FDD), extreme programming (XP), Rational Unified Process (RUP), Scrum and Kanban frameworks and/or methodologies for process management.

Accelerating collaboration
Polarion ALM uses a browser-based platform that allows 24/7 project access for geographically distributed teams. Members can access the portal over your network or through cloud-based networks anywhere/anytime using a web browser and plugins for selected third-party software or mobile applications. Live dashboards, reports and activity streams allow you to provide real-time delivery of key information and metrics, as required. Access-controlled, threaded commenting and email change alerts help you speed up collaboration while protecting data integrity. The Polarion LiveDoc solution provides the functionality you need to support collaboration with external teams.

Extending ALM capabilities
An open architecture with application programming interfaces (APIs) lets you extend the Polarion ALM solution to meet your needs. A 10,000+ Polarion member community has contributed nearly 200 extensions for Polarion products. Ready-made plug-ins for popular third-party tools such as Hewlett Packard Enterprise Quality Center, Jira, Simulink and more make it easy to set up an integration for internal and external teams using those options while removing adoption obstacles and ensuring a smooth transition.

Polarion ALM is built on top of Apache Subversion, a leading software configuration management (SCM) system. Beyond source code management, Polarion ALM provides functionality for managing all of your application lifecycle elements: system requirements and specifications, verification procedures, project plans and tasks. You can store relevant data in version-controlled repositories and track each process change. Optional support for electronic signatures ensures compliance with the United States Food and Drug Administration (FDA) 21 code of federal regulations (CFR) Part 11 and other standards.

Responding faster to changes
DevOps is a methodology that combines development and operations as a practice to emphasize collaboration and communication to help facilitate process automation. The DevOps-oriented capabilities in Polarion ALM can help you increase collaboration, reduce production risks and release your products or services in less time. Sharing information, plans and requirements helps your project teams respond faster to frequent changes, automate repeated cross-team tasks and reduce deployment errors.

Achieving traceability
Cross-project semantic linking and workflow controls can help ensure comprehensive traceability for your company. The robust reporting capabilities of Polarion ALM can make it easy for your company to certify compliance with regulatory governing bodies including: Capability Maturity Model Integration (CMMI); Communications and Power industries (CPI); Federal Aviation Administration (FAA); FDA; International Electrotechnical Commission (IEC); International Organization of Standards (ISO); Software Process Improvement and Capability Determination (SPICE).

Polarion ALM includes a certified ISO 26262 project template.

Software re-use and branching
Branching, in revision control and software configuration management, is the duplication of an object under revision control so that modifications can happen in parallel along both
branches. Polarion LiveBranch™ and document re-use provide easy yet robust ways to manage commonalities in your product variants without the use of copy/paste. Propagate changes in “master” specs to branched specs instantly or on demand.

Advantages
Application lifecycle management can help your company achieve a number of advantages. By using Polarion ALM, you can increase overall efficiencies by creating process standards and facilitating proper resource allocation. Through enhanced collaboration, Polarion ALM can help you provide complete and timely insight into all elements of the project lifecycle. It can also help you automate and streamline processes to achieve a faster time-to-market with higher quality products that meet your requirements and specifications.

Full traceability from requirements to source code.