

Executive summary

Companies that develop software for banks and financial service providers must organize their processes in accordance with strict regulations, and demonstrate compliance in audits and ratings. Polarion ALM™ software, an application lifecycle management (ALM) solution from Siemens PLM Software, accelerates processes and confirms compliance.

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Banks and financial service providers are subject to stricter business process requirements than just about any other kind of company. Regular internal and external audits are held to make sure these requirements are being reviewed, documented and, ultimately, fulfilled.

As digitization progresses, more business processes are supported or controlled by software; just as important is regularly developing, testing and documenting associated activities.

So it is critical to support these important kinds of activities with software as well. This white paper is based on the experience of a major European leasing provider that adopted Polarion ALM. As a result, the firm realized benefits in the overall software development lifecyle, specifically with improved collaboration between siloed departments and compliance throughout the organization.



New challenges in software development

In all countries of the European Union (EU), strict guidelines for banks and financial services are required due to Basel II. For example, in Germany there is the loan law, solvency regulation and the minimum risks to risk management (MaRisk). Companies that develop software for banks and financial service providers must comply with these regulations.

With regular checks by the Federal Financial Supervisory Authority (BaFin) as well as numerous internal ratings, companies must validate the conformity of all business processes. This applies not only to external software providers, but also the internal information technology (IT) departments that manage hardware and maintenance of standard software and the development of specific application software support.

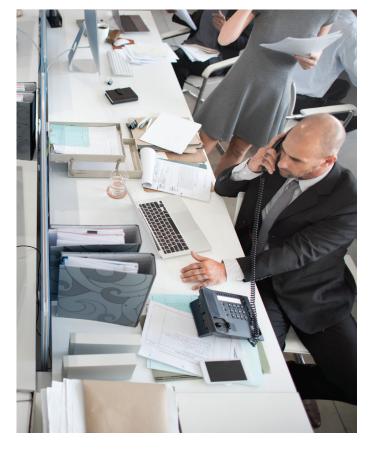
The depth and scope of activity may vary in every development department of a financial services provider. However, the same requirements apply to everyone. For example, at one leasing provider there is an application currently being developed, and the process is supported all the way from the offer to the conclusion of the contract. This Java based core product is connected through interfaces to SAP, Creditreform for credit inquiries and internal approval processes.

Other software, such as a leasing portal for distributors on the internet or a workflow and document management system, must meet the same regulatory requirements. The development of this software must be documented from the start, including the programming, order status, change status and releases. Many conventional software documentation development solutions can no longer guarantee the required consistency and traceability.



Linking cross-project requirements

Many of these solutions fail because they can't be linked to affected projects across the board. It's different with Polarion ALM, a software for ALM, developed and distributed by Siemens PLM Software. It supports application development throughout the lifecycle of products in the areas of teamwork, work processes and traceability. One particular advantage of using Polarion ALM to develop individual software is you can both link and track requirements and projects. Each of the customizable modules support change management, version and release management, audits, key performance indicators (KPIs) and reports for resource, quality and project management.



Traceability, testing and documentation

Traceability to the source code

In addition, software developers and IT coordinators benefit when using Polarion ALM by having frictionless cooperation because all relevant IT concepts, other related documentation and source code are saved in the public domain software Subversion. The source code is directly connected to the descriptive texts.

In this way, regulatory requirements can be followed up from conception to the source code. Eventually, auditors can be given every single software change along with the documentation. In addition, the binary files are simpler and filed more clearly, causing the technical work to become more efficient.

Automated testing

The above guidelines do not just apply to software. The documentation of the software and the changes made to it must also be regularly checked. Using a Word document to track changes would not be adequate. Each change to the regulatory requirements needs to be provable.

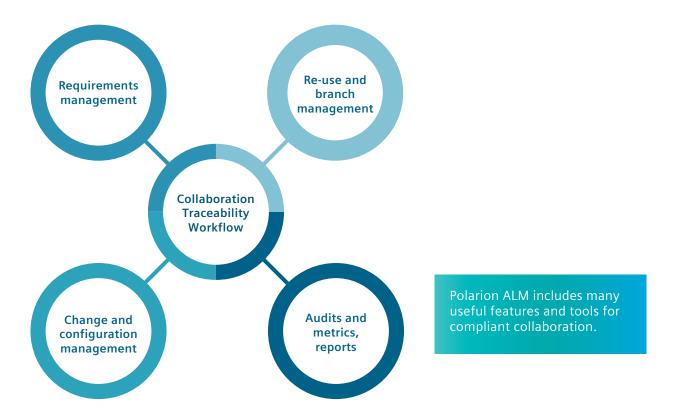
The accuracy of each individual document can only be verified by regular examinations; for example, such as on a yearly basis. Thanks to the flexibility of Polarion ALM and Subversion, automatic processes can be implemented to verify regular checks. To do this, the developers can create their own routines in Java that access the functionalities of Polarion ALM via an application programming interface (API). For example, scheduled internal controls can be managed and documented in a revision-proof manner.



Applying Polarion by department

Many audits and exams do not just affect software developers. With little effort, the described functions of Polarion ALM can be adjusted so that even auditors or supervisors are effectively relieved of their management functions. One major advantage is the browser-based interface of the web-based software, which does not require any local installation. Whether it is operated in the cloud or for security in a Citrix environment does not matter. As a result, the desired functions can be accessed at any time from any location.

Based on its architecture, Polarion ALM is a flexible system that can be tailored to meet the needs of a company. This allows software developers to reduce the workload of their colleagues at remote locations, adhere to given structures and improve productivity.



Professional project management

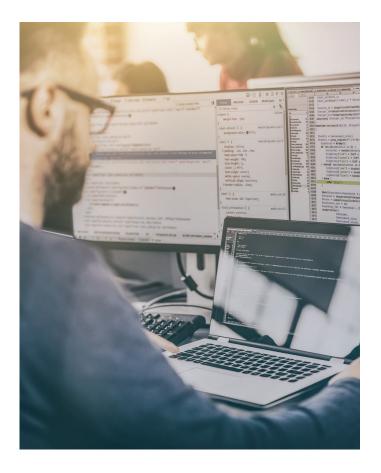
Of course, automated tests can also be set up for software development and documentation. Internal development processes are usually structured according to releases. Tests, reviews, documentation and formal processes are defined per release. Automatic processes are used to make sure participants are guided safely through all phases. For the workers as well as the examiners, it should be clear which phase has begun. For this purpose, project managers can receive automatic status notifications and checklists, which can document the completed steps. Such a structured approach means nothing should be overlooked and it will be straightforward to meet the regulatory requirements.

In addition, automatically tracking the release processes means that missing employees can be represented by colleagues at any time, because all pending and completed activities are transparently and comprehensively documented.



Flexible platform for compliant development

Polarion ALM can be used to not only fulfill respective expectations at the beginning of the project, but due to its flexibility it can always be adapted to new challenges. Thanks to excellent configuration options, programming skills are not required. In addition, the system is constantly being updated via upgrades. The software developers at Siemens maintain the product continuously and offer excellent service. Inquiries and suggestions for improvement will be answered earnestly and in a timely manner.



Conclusion

Using Polarion ALM helps software developers as well as people in many areas of the company. In turn, the software developers cannot only improve their processes with Polarion ALM, but can also save their colleagues a lot of work by using automation. This results in a significantly higher level of security in the processes as well as in the tests that affect them, leading to demonstrably better compliance with the regulations.

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About Siemens PLM Software

Siemens PLM Software, a business unit of the Siemens Digital Factory Division, is a leading global provider of software solutions to drive the digital transformation of industry, creating new opportunities for manufacturers to realize innovation. With headquarters in Plano, Texas, and over 140,000 customers worldwide, Siemens PLM Software works with companies of all sizes to transform the way ideas come to life, the way products are realized, and the way products and assets in operation are used and understood. For more information on Siemens PLM Software products and services, visit www.siemens.com/plm.

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