



DIGITAL TRANSFORMS PHYSICAL

# Codebeamer DevOps

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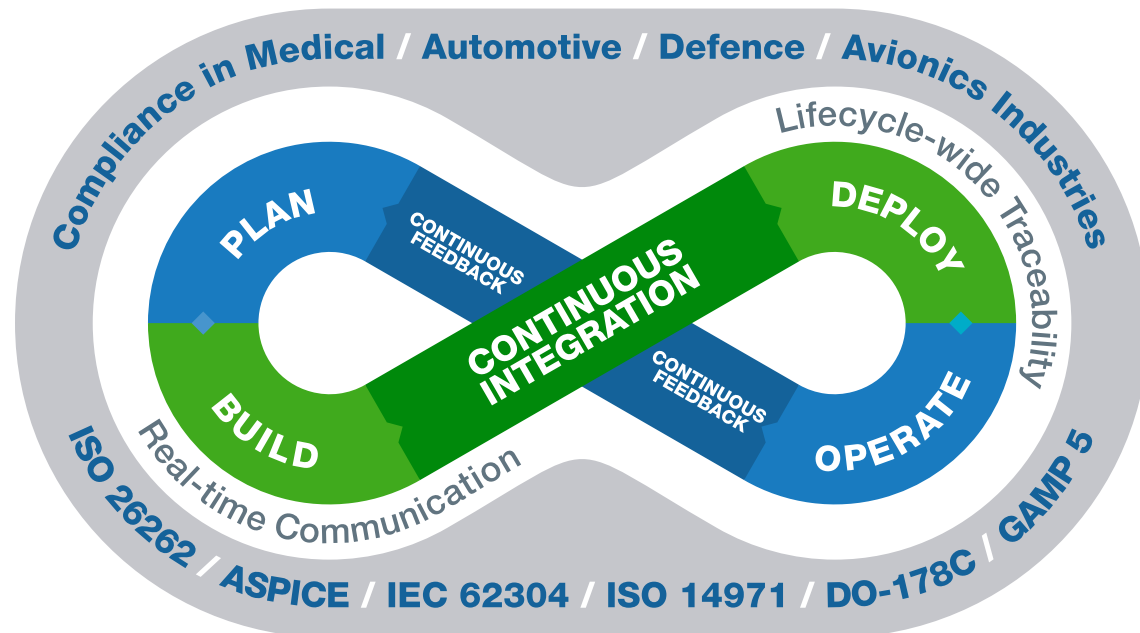


# Codebeamer DevOps

The functionality of the Codebeamer DevOps platform spans the entire lifecycle to help you align teams and stakeholders, enhance collaboration, automate your CI&CD pipeline, and integrate customer feedback across the process of development.

For safety-critical developers, it offers end-to-end traceability and an automatically recorded audit trail to bridge the gap between DevOps and auditors / compliance officers.

Codebeamer DevOps lets you optimize both effectiveness (e.g. "doing the right thing") and efficiency (e.g. "doing that thing right") across the DevOps value stream. It is the first Development+Operations platform specifically built for safety-critical industries with compliance support.



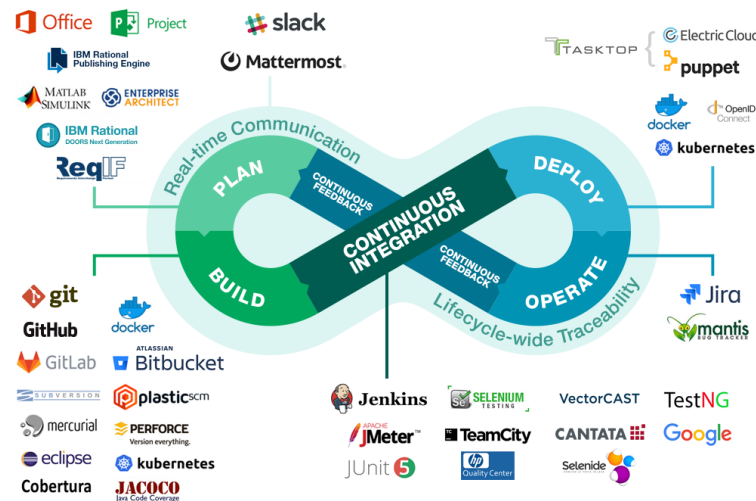
# Overview

**With a full set of Agile Dev and Ops features relying on a single central repository, Codebeamer DevOps lets you replace a fragmented chain of single-point tools with a central, holistically integrated platform.**

Therefore, it offers complete traceability and auditability for safety-critical industries (medical, automotive, avionics, pharma). Codebeamer DevOps automatically records a fully documented audit trail with e-signatures, and effectively bridges the gap between DevOps and auditors to accelerate compliance.

The platform has built-in features for Agile Planning, Continuous Integration & Delivery, build, testing, deployment, and monitoring. It also offers integrations with 50+ third party software tools to ensure traceability, easier review processes, and smooth audits. With a common backlog for all types of artifacts, it enables Value Stream optimization for user stories, bugs, requirements, test and all kind of artifacts.

The Codebeamer DevOps platform is a unique solution for companies that want to achieve more efficient product development with Agile, faster delivery fulfilling all customers requirements, complete risk management, and compliance with ISO/IEC/FDA/etc standard requirements.



# Planning

Codebeamer DevOps provides Agile Sprint and Release Planning capabilities to help you map and manage your sprints and releases. Record approved requirements and channel feedback into a global backlog, and prioritize requirements, tasks, bugs, etc using the Planner. Using this global backlog enables you to optimize your entire business value stream all in one place.

By enabling you to channel all types of artifacts into a single product backlog and prioritize those items efficiently, Codebeamer DevOps helps you focus on the activities that deliver the most value. Use a shared Kanban board to make Ops tasks visible for all stakeholders.

The screenshot displays the Codebeamer DevOps interface, which is used for project planning and management. It features several key components:

- Project Overview:** At the top, it shows the project name "QA - 9.1.0-S4" and various navigation options like "My Start", "Projects", "Reports", "Review Hub", "Wiki", "Documents", "Trackers", "SCM Repositories", "Baselines", "Admin", and "Trash".
- Sprints and Backlog:** On the left, there are sections for "SPRINTS" and "Hardware development Backlog". The "Hardware development" sprint is active, showing a list of items with their ranks and summaries. Below it, the "Product Backlog" is visible, listing various tasks and bugs.
- Task Details:** The main area shows a detailed view of a task, including its rank, priority, and summary. A list of tasks is displayed, each with a status icon (e.g., bug, task, requirement) and a description. For example, one task is "[BUG-1464643] Bug for 'Carbon-fiber plastic material Test'".
- Team and Member Management:** On the right, there is a "TEAMS" section showing the "Test Team", "Development Team", and "Support Team". Below it, a "MEMBERS" section lists team members and their roles.
- Issue Details Panel:** On the far right, a "DETAILS" panel provides information about a specific issue, including its tracker, priority, type, status, severity, resolution, release, assigned to, submitted by, modified by, user story, planned effort, and spent effort.

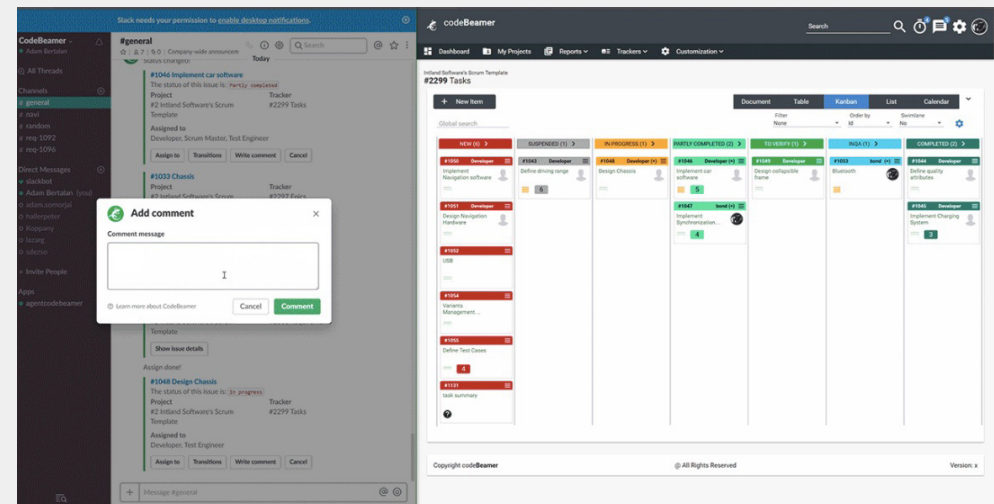
# Review, ChatOps and Build

Use custom review & approval workflows, let your team members vote on artifacts, and use the Review Hub to gather feedback about all kind of artifacts.

Like the code review process that is so commonly used in software development, the general review process offered by PTC®'s Codebeamer technology is a highly effective way of enhancing quality while providing complete transparency.

Take advantage of ChatOps to put your conversations to work. Integrations with Slack and Mattermost enable you to take collaboration to the next level using AI-backed chatbots, cross-platform commands, and more.

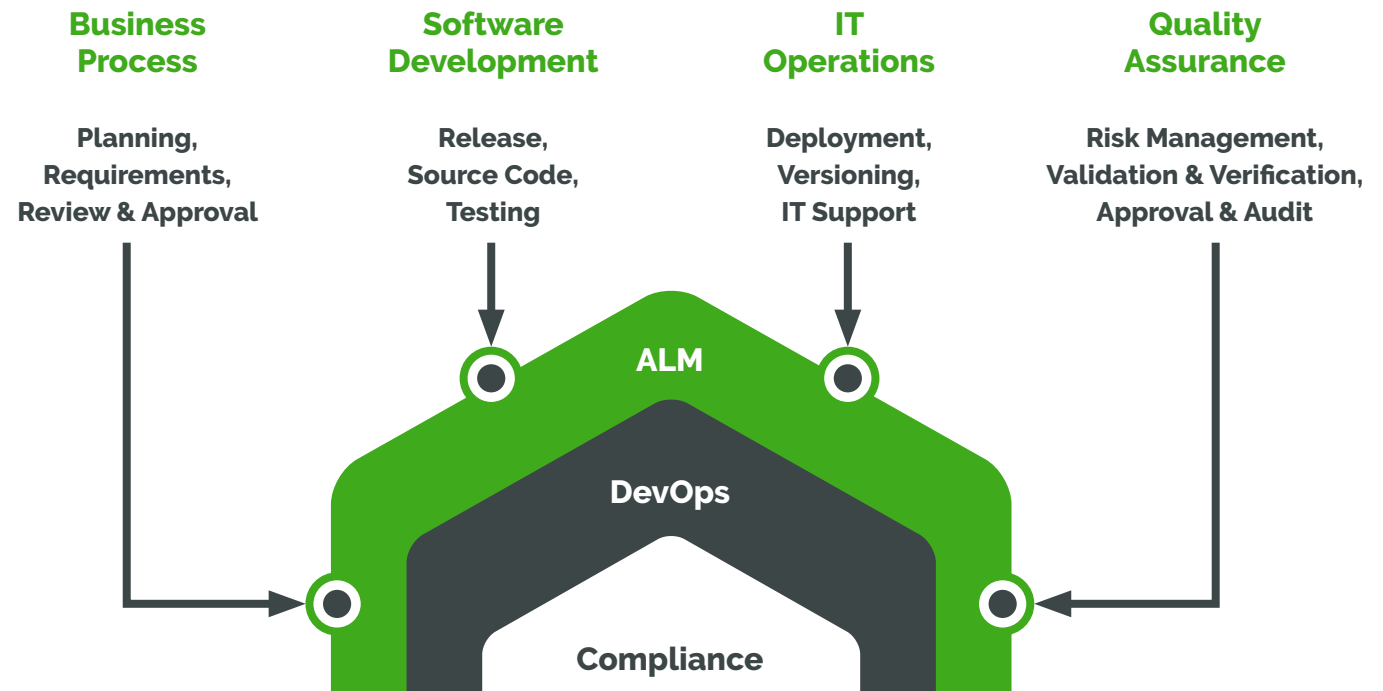
Use Codebeamer DevOps's complete software development functionality with fully traceable work items and custom processes. Codebeamer Devops is integrated with Git (GitLab, GitHub with pull requests), Subversion, Mercurial, Plastic SCM, and Perforce VCS for source code management and version control. Automate the build process funnelling into your CI pipeline using Jenkins. Use a staging environment to test code before deployment.



# Testing and CI

Automate Continuous Integration & Continuous Delivery processes, accelerate cycle times, and reduce failure rates and downtime. Fix problems early and often, minimize costs, and improve product quality. Codebeamer DevOps lets you manage all your manual and automated testing activities all in one place.

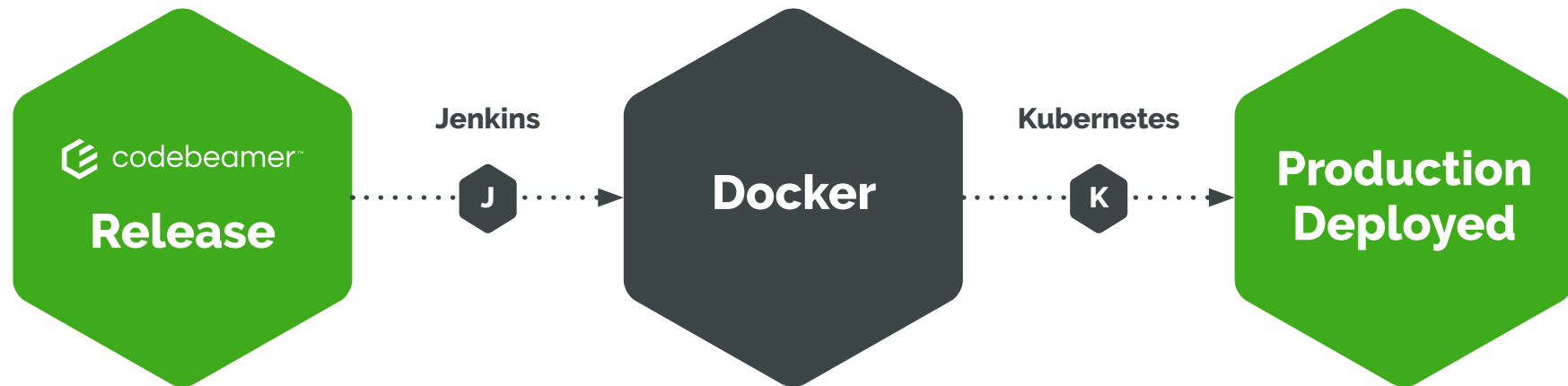
With parametrized testing and integrations with automated testing tools (Jenkins, JUnit, JMeter, Selenium), Codebeamer DevOps streamlines your CI pipeline. The system also supports test analysis and lets you set up insightful dashboard and reports for monitoring and feedback.



# Release and Deployment

Automate Continuous Integration & Continuous Delivery processes, accelerate cycle times, and reduce failure rates and downtime. Fix problems early and often, minimize costs, and improve product quality. Codebeamer DevOps lets you manage all your manual and automated testing activities all in one place.

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# Operation and Monitoring, Continuous Feedback, DevOps Analytics Dashboard

Keep track of, analyze, and report on all monitoring data with visual reports in Codebeamer DevOps. Integrate any tool via Slack to monitor the performance and stability of your application and infrastructure.

Receive e-mail or Slack notifications right when and where you need them, enabling your team to swarm on issues in a timely manner. Manage escalations with automated workflows, and enhance visibility with a filterable Kanban board to stay on top of Ops processes. Create custom reports with visual graphs to uncover bottlenecks.

Incorporate customer feedback in the process of development by configuring a fully customizable Service Desk for your users. By creating executable work items, the Service Desk channels user feedback right into the process of development, all in a traceable manner.

Stay on top of incident management and problem tracking using Codebeamer DevOps's built-in project and quality monitoring features. Integrate feedback submitted via e-mail, customize notification rules, and configure custom integrations via REST API.

Give your developers, managers, and operations team a single view of the entire value stream even across projects. Monitor progress and collaborate using any device (mobile, PC, or tablet).







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