CASE STUDY

Pegasystems Improves Development and Deployment Process Efficiency with DevOps

PEGA®

Industry
Software

Geography
North America

Summary
Pega boosts competitive advantage and time to market by leveraging continuous integration, continuous delivery and CloudBees CI, speeding deployment times by 92%.

Challenge
Reduce overhead, increase speed of release cycles and improve quality by automating and streamlining build, test and deployment processes.

Solution
Run Jenkins at scale with CloudBees CI to enable developers to focus more time on high-value tasks.

Results
- Deployment times cut by 92%
- Testing times reduced by 50%
- Expert problem-solving support received

Product
CloudBees CI

Pegasystems – the software company empowering digital transformation at the world's leading enterprises – is the leader in software for customer engagement and operational excellence. Its clients include a who's who of the world's leading brands, including healthcare, insurance, banking, global communications service providers, manufacturing, government, and more.

The company's track record of success is due in large part to Pega's software development organization, which is in the midst of a DevOps transformation. That transformation, based on continuous delivery supported by CloudBees CI, is helping Pega deliver new capabilities to its clients faster, which in turn helps those clients to thrive in their own markets.

According to Pete Hayes, senior director, developer productivity engineering, Pegasystems is focused on improving both efficiency and quality.

Previously, getting any new code change into Pega's development systems required a lengthy, multi-day effort. "Now, instead of taking as long as three days to complete that process, we are doing it in a couple of hours," says Hayes.

CHALLENGE

Shorten release cycles by automating and streamlining build, test and deployment
The Pega development organization faced a unique challenge: building and testing software in a multi-step process that accommodates both the Java-based rule engine that forms the foundation of the Pega Platform™ – Pega's unified, no-code, digital transformation platform – and the rules that run on it. In the past, this process led to lengthy release cycles.

-92%
Deployment Time

-50%
Testing Time

"When a company begins offering its software as a service, it increases the expectation to deliver new capabilities faster. We wanted to reduce our cycle times even more," says Hayes.

Scalability was also a challenge: lots of manual clean-up was required and the system was costly to maintain. Although Pega developers were supporting and enhancing the system, it negatively impacted job satisfaction and took time away from high-value tasks.

SOLUTION

Run Jenkins at scale with CloudBees CI
Pega is using CloudBees CI to run Jenkins at scale on AWS, shorten release cycles and build up continuous integration, continuous delivery and DevOps capabilities. The transition to CloudBees CI enabled Pega to significantly streamline its infrastructure and optimize the use of available resources.

"Moving to CloudBees CI simplified the entire infrastructure and reduced our resource needs," says Hayes. Pega now uses Jenkins Pipeline to define and automate processes making it easier to define, manage and manipulate processes and the way tests are executed.

"Jenkins Pipeline has been a huge advantage for us for maintainability, traceability and merging," says Hayes.

For Pega, running Jenkins at scale meant addressing several critical operational needs, such as automating backups, managing masters and restricting access to jobs based on user roles.

"We didn't want to build it ourselves," says Hayes. "We use support frequently, and it has helped us be more efficient, deliver higher quality and enables us to focus on the high-value tasks that really make a difference for our clients."

Pega uses CloudBees Jenkins Operations Center to manage and upgrade nine different masters in use by cloud infrastructure, platform, application and testing teams.

"We use the Role-Based Access Control plugin because we need to customize and ensure that everyone has the appropriate level of access," says Hayes.

"CloudBees CI has become the heartbeat of our development team and the central point that everyone uses to see the status of the code base and what is happening with it right now. Having that transparency and visibility into the quality of our code is incredibly valuable."

– Pete Hayes, Senior Director, Developer Productivity Engineering

Hayes is pleased with the progress made already. "We've had positive feedback from our developers," he notes. "That lets me know that CloudBees CI is making our developers happier by making their jobs easier and giving them more time to create new capabilities for clients instead of worrying how to deploy and test those capabilities."

RESULTS

Deployment times cut by 92% (from three days to two hours).
"With CloudBees CI, instead of taking as long as three days to get a code change into our development systems, we are doing it in a couple of hours," says Hayes.

Testing times reduced by 50%.
"The move to CloudBees CI shaved at least 30 minutes off our testing times," says Hayes.

Expert problem-solving support received.
"We meet with CloudBees weekly and the team will pull in developers or key support staff when we need it," says Hayes.