CloudBees.

CASE STUDY

Banking Innovator Empowers Developers with Next-Gen Automation



Industry Financial Services

Geography

Europe

Summary

This leading European bank adopted CloudBees, enabling it to build a unified development platform to accelerate the delivery of new features, while improving the developer experience.

Challenge

As competition in the banking sector intensifies, the bank needed to standardize all of its teams on a modern CI/CD platform with development tools and practices that are highly secure, scalable, and automated.

Solution

As a part of the company's digitization efforts, the financial institution adopted CloudBees to improve configuration management, deliver applications faster, and enhance software quality.

Results

- Increased time to market from approximately months to weeks
- Increased and standardized automation systems, creating a better developer experience and increasing productivity.
- Boosted product quality with development tools and practices that are more stable, faster and easier to reproduce.
- Benefited from strong technical support and consistent ongoing communications with CloudBees Technical Success Managers.

Product

CloudBees Cl

CHALLENGE

Across Europe and worldwide, banks are increasingly dependent on great software to power their business and drive market success. CloudBees studied one bank that epitomizes this trend: a financial institution serving millions of private and corporate customers across the region. "Our region is quite advanced when it comes to technology, so there is constant pressure on the bank to keep up with the fast-moving competitors," the bank's top software engineer said. "The future is highly digitized and it's driving a lot of what we do."

Recently, the company's IT organization has been focused on launching new mobile banking services and moving more operations to the cloud – a daunting assignment for an engineering team that spans multiple countries. The group supports its engineers with the latest tools and approaches to automate software development.

"The number of developers, tools, and development processes needed to build our products is huge," the senior engineer said. "Trying to automate the entire workflow from the developer's workstation all the way out to production is an ongoing challenge." Especially tough for development teams is managing the proliferation of complex configurations required in these environments. "As organizations need to move faster to meet the demands of the market, better and stronger techniques for configuration management are needed," he said. "This is one of the really big challenges we faced."

The bank's overarching goals was to standardize workflows and configurations across the regions to accelerate the delivery of new features and provide faster feedback. "We wanted to streamline the tooling and provide modern automated software delivery throughout the organization by offering a centralized platform for continuous integration (CI)," the engineer said. This effort would include collaboratively maintained shared libraries and sample pipelines and best practices to spread the knowledge throughout the company.





SOLUTION

The bank chose CloudBees as the foundation of its nextgeneration software delivery platform. The decision was influenced by CloudBees' expertise in simplifying diverse workloads while supporting the unique workflows of developer teams.

"CloudBees is a very flexible tool," the bank's engineer said. "Its distributed environment allows for different types of configurations and technologies, ways to support multiple technologies, and ways to perform software development. It's better than a Swiss Army knife." Today, hundreds of developers, testers, and operations personnel are using CloudBees at the bank to orchestrate and automate software delivery throughout a large portion of the organization.

With CloudBees as its CI/CD platform, the bank is introducing more automation across the development lifecycle and standardizing these processes as much as possible to capture even greater benefits. "Standardizing your applications is where you really start getting the benefits of reusing automation, code structures, and ways of working," the engineer said. "This is how an organization really starts to gain speed in the market as it's trying to compete with other companies."

Already, the bank has been seeing tangible improvements, including faster development cycles from code writing to production. For example, since moving to CloudBees, legacy applications that used to take several months to build and deploy can instead start from scratch and in just a few weeks have something up and running in production.

Configuration as code

To enable "one-click deployments," the bank built its own codebased system for configuration management with CloudBees CI at its center. The configuration-as-code system enforces a specific setup value for each configuration and notifies engineers of any errors in real-time. The financial institution can now configure multiple systems in one go so that when development teams want to build an application, they can get the process started with a single software change or pull request. Users can now configure different systems all at once including deployment pipelines ready to put into production.

Robust configuration management systems are also helping developers ensure their development processes are secure -- a must for modern financial services companies. "To make sure we're doing this in the most secure way possible, we need to have strong configuration management," the engineer noted. Using code-based configuration management with CloudBees also helps the bank quickly and securely recover from an outage. "With CloudBees, if we lose one system, we can rebuild the entire infrastructure from scratch, from code," he explained.

Configuration as code is rapidly becoming a necessity for financial companies, where software applications and environments – and the myriad configurations they generate – are becoming increasingly complex. Organizations today need the speed, quality, and repeatability to build modern development and test environments, he said. "Today you cannot deploy an application without its proper configuration, and of course, everything underneath it."

"CloudBees products are quite mature and the available support and materials are good resources for people to learn and educate themselves, which helps with alleviating some of the burdens we have internally."

- Principal Software Engineer

Strengthening the partnership

Today, this European bank continues to improve on its CI/CD platform, working closely with support and development teams from CloudBees to enhance its software delivery solutions. The relationship has been bolstered with the help of CloudBees Technical Success Managers (TSM) – a team of continuous delivery experts committed to ensuring that CloudBees enterprise solutions meet and evolve with the bank's business needs. The TSM team provides a single point of contact for any issue through a variety of channels.

"Consistent communication and support from our TSM have built a strong relationship between CloudBees and the bank," the engineer said. "We can bring different issues to the program through communications channels like the support portal and the RFE – request for enhancement – portal." And while the bank has benefited significantly from the TSM program, so has CloudBees, which uses feedback from the bank to help guide development of new features and shape the direction of its product roadmap. "Without question the quality is so much better from having a more formal way to write your software and your configurations."

- Principal Software Engineer

RESULTS

Delivering applications faster

Since adopting CloudBees, this European bank has decreased the time to deploy applications into production from months to just weeks. "[Before CloudBees], we didn't have the containers, the pipelines, the process, the approvals – all the stuff I needed to request," said the bank's senior software engineer.

Greater visibility and efficiency

"CloudBees has given developers more visibility into how they develop, test and automate, making it easier for them to work on applications and improve their overall workflow," the engineer said.

Better quality

Adopting configuration as code with CloudBees has driven measurable improvements in software quality at the bank. "Without question, the quality is so much better than using a more formal way to write your software and your configurations," the engineer said. "This is because everything is done as code. The stability and the quality of services are much more stable, faster and easier to reproduce."

More robust business continuity

By using a code-based configuration management system, the bank can quickly restore service and maintain business continuity after an outage. "We can rebuild the entire system from scratch from code," the bank's top engineer said.

Consistent communication

"The CloudBees Technical Success Manager (TSM) program is our single point of contact into CloudBees for all matters relating to the running of the software," the engineer said. "They've also put us into contact with other people within CloudBees to help solve issues."

Growing CI/CD adoption

"In some ways we have become victims of our own success," the bank's software engineer said. "There are so many users who wish to onboard that it has been a struggle to keep up with the demand within the bank. Several legacy CI systems have already been terminated and the users and workloads migrated to CloudBees."

CloudBees Cl is built on top of Jenkins, an independent community project. Read more about Jenkins at: www.cloudbees.com/jenkins/about

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