



With a DevOps mindset and approach, Suramericana is establishing a reputation for delivering innovative new insurance products to its 10 million customers and breaking into new markets across Latin America.

CHALLENGE

Increase the pace of delivery for new insurance products to gain a competitive advantage

SOLUTION

Drive a DevOps transformation by implementing CI and CD with the CloudBees Jenkins Platform to break down silos, speed deployments and improve application quality and security

RESULTS

- » Deployment time reduced from two weeks to two hours.
- » Defect counts cut by about 75%.
- » Thousands of deployment hours saved.



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Suramericana Sparks Growth into New Markets, Increases Pace of Innovation with DevOps

To maintain an edge over its competitors and bring high-quality insurance products to market faster, Suramericana recently embarked on a DevOps transformation powered by the CloudBees Jenkins Platform and rooted in agile development, continuous integration (CI) and continuous delivery (CD). Its DevOps approach has brought new customers onboard at a record pace and spurred the company's growth into new markets. Insurance products that previously took weeks for customers to purchase now take just minutes online.

Behind these improvements is an optimized software development process that was established in advance of Suramericana's launch of WeSURA, a collaborative insurance solution that enables individuals to insure personal property as small as a bicycle, smartphone, tablet or laptop, through an on-line portal. Just two months after it launched, WeSURA had attracted thousands of customers in hundreds of communities.

At the heart of the success of WeSURA is Suramericana's team of dedicated professionals committed to bringing industry best practices to bear for the benefit of the company and its customers. Additionally, adoption of the CloudBees Jenkins Platform provided the foundation to support these important initiatives.

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Ryan Berrío Cardona
Suramericana, Director of IT Architecture

“Our DevOps strategy and the CloudBees Jenkins Platform gives us a competitive advantage by allowing us to rapidly deliver the applications and features that our business analysts ask for and that our customers need,” says Jennifer Pérez, software developer and DevOps implementation analyst at Suramericana.

Previously, purchasing insurance was not an easy or fast process for customers. It took weeks for new policies to be processed, requiring manual processing of paperwork that had to be mailed in by customers. Suramericana knew there had to be a better way to make the process faster and easier for customers. The company turned to DevOps as the solution and, in the process, strengthened its competitive position in a way that created new opportunities in markets beyond its Columbia headquarters.

“With DevOps and CloudBees, we are able to innovate faster and deliver more value and better service to our customers than ever before and with higher quality and security features than we ever thought possible,” said Ryan Berrío Cardona, director of IT architecture. “We have strengthened our market position and have been able to quickly expand into more regions which ultimately drives revenue.”

CHALLENGE: DELIVER INNOVATIVE INSURANCE PRODUCTS FASTER, MORE SECURELY AND WITH HIGHER QUALITY

Once Suramericana business analysts conceive of a new product such as WeSURA, the responsibility for implementing and delivering the software behind the product falls to the company’s IT organization, which includes more than 800 developers, testers, database administrators and architects.

Like many organizations, Suramericana had a traditional software development approach with departments working independently. Suramericana conducted an assessment of its software development practices and uncovered issues typical of large enterprises: silos within IT, long development timelines, processes that relied on numerous manual tasks, artifacts that did not meet the company’s quality standards and a lack of visibility into the development process and application health.

As a first step in addressing these issues, IT teams adopted agile methodologies and began implementing CI and CD practices using Jenkins installed on a server. The Suramericana teams had made initial progress but had not overcome the obstacles they were facing.

“We had made a lot of progress, but we had to move faster,” says Pérez. “It was taking us two weeks to go to production in a core project. We knew we needed more than we were getting from open source to achieve our business goals.”

The challenges that persisted were amplified when the IT organization began working on a new project to integrate Suramericana’s existing systems with a new core insurance back-end from a third party. This was among the largest and most complex projects the group had undertaken, both in the number of resources required and the technologies involved. Around the same time, the number of projects using CI and CD had also steadily grown from three to more than 120, underscoring the need for scalability and enterprise-level support.

“We had more than 150 people involved when we started the process of adopting a DevOps culture,” says Berrío. “It was clear that we needed to build confidence in our DevOps strategy within the company, scale our approach and enable all of that with professional support.”

Security was another top priority for the IT organization as scale increased. Many Suramericana systems handle clients’ personal financial information and the organization wanted to enhance security by limiting access to development and production environments.

“The security of our applications is critical for our clients, both externally and internally within Suramericana,” says Pérez. “For example, a team should only have access to builds and to production for their project, not any other team’s projects.”

SOLUTION: POWER A DEVOPS TRANSFORMATION WITH CLOUDBEES FOR SCALABILITY, SECURITY AND SUPPORT

Suramericana bolstered its DevOps transformation and adoption of CI and CD practices with the CloudBees Jenkins Platform backed by enterprise-class support from CloudBees engineers.

Early on, the IT team recognized that such a DevOps transformation requires more than new tools and practices; it requires affecting a cultural change and leadership support as well. Some business analysts were initially wary of the new approach and reluctant to embrace it. Pérez, Berrío and their colleagues gradually won over these skeptics by providing additional training on CI and CD practices and documenting the early successes Suramericana teams had already achieved.

The team enhanced security by implementing a new authentication scheme in which they use the Role-based Access Control and Folders plugins to restrict team access to only their projects supporting the security compliance required by their clients.

As they began to operate at scale, they used the analytics feature in CloudBees Jenkins Operations Center to gain insight into the organization’s Jenkins usage. For example, at one point they

identified how much development productivity was being lost due to a lack of available shared agents.

For the large, core insurance back-end integration project, the team took time to prepare its existing Jenkins setup, adapting Maven Ant tasks and automated tests as needed to work with the third-party software. For example, because the software lacked an easy way to implement rollbacks in production, the team incorporated additional unit and integration tests in Jenkins to further verify the stability of released versions.

The DevOps transformation powered by the CloudBees Jenkins Platform steadily dismantled the silos that had kept development, QA, operations and business analyst teams from working effectively together. Whereas in the past developers might create a new feature that did not completely match what analysts had envisioned, now the analysts were taking an active role in creating user stories with agile development teams.

Likewise, instead of simply reporting that a “system is not working,” business analysts can identify a specific feature that is broken and suggest possible remedies.

“Our analysts now have visibility into all aspects of the process, including development and operations so that the features being developed better meet business needs and are delivered to customers faster,” says Pérez.

Suramericana currently has one Jenkins master with 18 shared agents, orchestrating more than 7,000 automated unit, integration and end-to-end tests and 50 automated deployments daily across five environments for 120 different applications. Looking ahead, the IT team plans to begin using the High Availability plugin to minimize downtime and the Blue Ocean UX to visually create and manage continuous delivery pipelines.

RESULTS

Deployment time reduced from two weeks to two hours.

“With Jenkins, our build and testing processes involved numerous manual tasks and we needed up to two weeks to deliver to production,” says Berrío. “With the CloudBees Jenkins Platform, we’ve automated these steps and can now deploy to production in about two hours.”

Defect counts cut by about 75%.

“Applying agile methods and CI and CD practices with Jenkins and CloudBees has helped us improve the quality of the products we deliver and accrue no technical debt,” says Pérez. “Today, our total defect count for four separate projects is about the same as we had on a single project in the past.”

Thousands of deployment hours saved.

“Over the past 18 months, we performed more than 28,000 deployments to our QA environment and almost 2,000 deployments to production all with 100% success,” says Berrío. “Automation with Jenkins and CloudBees enabled us to reduce the time needed for these deployments by more than 7,500 hours.”

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