





Industry:

Technology Consulting

Geography:

North America

Summary:

Accenture led an effort with its client, a leading North American company, to adopt a DevOps practice, enabling the IT organization to speed deployments and match the rapid pace of innovation required for the success of the client's strategic business objectives

Challenge:

Enable its client to capture market share and grow customer loyalty with rapid software innovation in support of its business strategy

Solution:

Transform the continuous delivery pipeline and adopt a DevOps culture underpinned by CloudBees Core

Results:

- » Production deployment time cut by more than 90%
- » Environment set up time decreased by 96%
- » Development build and deploy times reduced by more than 75%
- » Downtime for deployments reduced by 100%

Product:

» CloudBees Core

Accenture Helps Leading North American Company Propel its Strategy with a DevOps Transformation

For the past four years, a leading North American company has been capturing significant market share from its competitors by regularly rolling out new service offerings to millions of customers as part of its strategic marketing campaign. This series of customer-focused offerings was being launched at lightning speeds.

Successful execution of the strategy hinged upon the organization's ability to implement innovative new features and changes in the company's web applications in rapid-fire succession. To make this possible, the organization partnered with Accenture to transform its continuous delivery pipeline and kick off a DevOps transformation with CloudBees Core.

"Our client's campaign demands a lot of new offers and quick IT changes be rolled out to production," says Ravish Pathak, technology consulting manager and DevOps practice lead at Accenture.

Challenge

Create a Best-in-Class IT Organization to Deliver on the Promise of Client's Marketing Strategy

Prior to embarking on the DevOps transformation, Accenture had identified several software development challenges within its client's organization that are typical of large enterprises. These challenges were making it difficult for the team of several hundred developers across multiple geographies to deliver quality applications reliably and at the pace of business demands. The team's testing approach was entirely manual and ad hoc, with no unit test coverage. Code versioning, provisioning and deployment were also manual processes and there was no set strategy for branching or releases.





The internal challenges faced by the team manifested in ways that were apparent to the business. Each release caused a service outage of several hours and required a large team to deploy, test and execute. Though the outages were scheduled during off-peak hours, they still affected customer perception and experience. The quality of the production releases was also an issue.

Solution

Establish a DevOps Culture and Transform the Continuous Delivery Pipeline with Jenkins and CloudBees

Accenture worked with its client to implement DevOps practices using the Accenture DevOps Platform (ADOP) – an integrated tool environment anchored by CloudBees Core for continuous integration and continuous delivery.

In the early stages of the initiative, the team looked for easily-achieved automation objectives to build the team's confidence in DevOps and spark the change in mindset that must accompany a DevOps transformation.

Once the feasibility of the approach had been established, the team engaged CloudBees and deployed CloudBees Core. Working with CloudBees Core, the team fine-tuned build and deployment jobs with automated inline testing that includes security scans, functional tests and load tests upon commit. These are now performed as part of the delivery pipeline based on business needs.

During the initial stages of the transformation, development teams relied heavily on a dedicated operations team for assistance when problems arose. Mitigating this reliance and persuading developers to address the issues themselves required another shift in mindset and culture.

"We had solved one problem but created another in the dependency on the DevOps team," says Pathak. "To address this, we empowered the developers to perform their own self-service for provisioning, deploying and other development tasks so that development teams owned the responsibility of writing the code, being responsible for Telemetry, and making it live."

"We would not have been able to achieve this level of innovation without the adoption of DevOps and CloudBees Core. This has had a big impact on our client's customer experience."

Ravish Pathak Technology Consulting Manager and DevOps Practice Lead Accepture

To eliminate the downtime required for each production release, the team established a blue/green deployment capability. The new release is deployed into an environment identical to the live production environment and then traffic is switched instantaneously without impacting any customers.

"From a DevOps perspective, CloudBees Core has enabled us to establish a self-service model for our delivery pipelines, automate previously manual processes, build trust in IT and empower our developers to keep pace with the goals set by business and marketing teams," Pathak concludes. "What this means is that new features are delivered seamlessly to customers, improving their experience."

Results

Production deployment time cut by more than 90%.

"In the past, production releases took several hours to complete," says Pathak. "With CloudBees Core, we automated parallel deployment and cut deployment times by more than 90%."

Environment set up time decreased by 96%.

"In the past, we had a manual process for environment set up that used to take several hours," says Pathak. "Through automated stack provisioning, standardized stack templates and automated content synchronization using Jenkins, we've reduced the time required by 96%. Jenkins has helped us enormously in this area."



Development build and deploy times reduced by more than 75%.

"Using CloudBees Core, we merged build and deploy jobs and empowered our developers to perform self-service deployments. As a result, these build and deploy times have been reduced by more than 75%," says Pathak.

Downtime reduced by 100%.

Previously, new releases required several hours of downtime. Now, releases are pushed to production without any downtime. "From a DevOps perspective, CloudBees Core has enabled us to establish a self-service model for our delivery pipelines, automate previously manual processes, build trust in IT and empower our developers to keep pace with the goals set by business and marketing teams."

Ravish Pathak Technology Consulting Manager and DevOps Practice Lead Accenture

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