



Optimizing the Release Management Process for a Bank with DevOps

Client

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The Client is a cooperative, wholesale bank that helps meet community credit needs by providing readily available, competitively priced credit products and services to financial institutions. Members include commercial banks, credit unions, industrial loan companies, savings institutions, insurance companies and community development financial institutions.

Challenges

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The Client faced challenges in managing their release management infrastructure for multiple applications with a high degree of complexity. Some of the challenges in the process were:

- ▶ The Client's existing processes involved persistent delays due to multiple manual interventions resulting in errors and bottleneck
- ▶ The existing infrastructure and release management solution involved legacy tools
- ▶ More than 50 people were working on multiple projects across two geographical locations, and the Client wanted to improve collaboration between the co-located teams
- ▶ There was very little visibility/reporting into the complete release management processd teams

The Client wanted to re-engineer the release management process and automate it to reduce the effort and time involved in the release management process.

Solution

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Opteamix implemented a DevOps strategy to automate the current build and deployment process:

- ▶ Executed a Continuous Integration (CI) Process Framework complementing the Delivery Framework
- ▶ Applied a Continuous Integration suite using Jenkins to build the components on code check-in to Bitbucket
- ▶ Created artifacts comprising build components (Jar and War files, DB scripts and configuration files)
- ▶ Automated the regression testing using the proprietary Behavior Driven Testing Framework

- ▶ Implemented SonarQube Quality check to improve code quality
- ▶ Included the functionality of delivering notifications on failure at any point during the CI Process

Technology Stack

- ▶ Jenkins
- ▶ Capistrano
- ▶ Nexus

Value Delivered

Through the implementation of DevOps automation, the Client:

- ▶ Enhanced the Software Delivery Lifecycle
- ▶ Increased the efficiency and speed of the delivery teams
- ▶ Improved the quality of the deliverables
- ▶ Reduced costs/expenditure

It helped them to:

- ▶ Eliminate manual deployment effort and decrease the deployment cycle time by 50%
- ▶ Reduce the dependency on individuals for release management
- ▶ Integrate the BDD-based test automation framework that improves the quality of deliverables
- ▶ Improve team collaboration and development visibility with the integration of next-generation DevOps tools
- ▶ Keep track of build history and errors while enabling notification of build status
- ▶ Schedule the process to run at a given time or trigger it when a developer merges his code to a branch
- ▶ Take care of day-to-day vulnerabilities via the SonarQube quality check, which helps improve the quality of the code

About Opteamix

Opteamix is a digital automation technology consulting firm with deep expertise in Application Development, Robotic Process Automation, Artificial Intelligence, DevOps, Enterprise Mobility, and Test Automation Services. We are headquartered in Denver, Colorado with a wholly-owned delivery center in Bengaluru, India.