

ESG BUSINESS JUSTIFICATION BRIEF

# AWS Marketplace Series: CloudBees: How to Automate and Scale Continuous Integration with AWS

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## Application Development Challenges

According to ESG research, 86% of survey respondents say they face pressure to accelerate development and launch new products and services.<sup>1</sup> Certain application development practices, however, slow down software releases. For example, siloed developer teams, diverse point tools, lack of standardized processes, and bolted-on security lead to inefficiencies and inconsistent outcomes. Subsequently, these practices can drive up costs related to tool licenses, quality control, and governance.

To address these challenges, 70% of companies have implemented DevOps methodologies to automate continuous integration (CI) and continuous delivery (CD) of code and application infrastructure at least in a limited fashion.<sup>2</sup> Additionally, 55% of organizations have incorporated security into their DevOps processes extensively or in a limited fashion.<sup>3</sup> Ideally, more businesses will apply automation and orchestration not only to speed development but also to share knowledge, enforce standards, and build security into developer pipelines.

When asked about factors related to application development:<sup>4</sup>

 **48%**  
of companies plan to identify and remediate workload and container configuration and software vulnerabilities before deployment to production.

 **57%**  
use or plan to employ serverless computing for benefits of agility and faster time to market when building new applications.

 **19%**  
reported a shortage of application development/DevOps skills.

## Continuous Integration with CloudBees CI

CloudBees CI provides a CI/CD management solution for scaling the Jenkins automation platform to support centralized enterprise software delivery. Tightly integrated with Amazon Web Services (AWS), CloudBees CI works with Amazon EC2 Spot, Amazon Elastic Container Service for Kubernetes (EKS), Amazon Elastic Compute Cloud (EC2), Amazon Identity and Access Management (IAM), and other AWS services. With CloudBees CI, organizations can migrate developer workloads to the cloud and standardize software development processes. Built-in policy enforcement, best practices, security, and compliance help to lower administrative load, drive governance initiatives and increase developer efficiency. Organizations can scale their development efforts with AWS Cloud infrastructure provisioning and 24x7 support.

The following capabilities help to streamline DevOps:

 Simplify onboarding with preconfigured templates and policies.

 Find and fix defects early in the pipeline with static analysis security testing.

 Integrate approvals, rejections, and remediation steps into developer workflows and tools.

 Visualize the software pipeline and monitor developer progress.

 Maintain governance with protocols such as CloudBee's role-based access control (RBAC).

Sources:

<sup>1</sup>ESG Master Survey Results, *Trends in Modern Application Environments*, December 2019., <sup>2</sup>ibid.

<sup>3</sup>ESG Research Report, *Leveraging DevSecOps to Secure Cloud-native Applications*, March 2020.,

<sup>4</sup>ESG Research Report, *Leveraging DevSecOps to Secure Cloud-native Applications*, March 2020, and ESG Research Report, *2020 Technology Spending Intentions Survey*, February 2020.

### Why AWS Marketplace?



Choose from thousands of solutions



Pay only for what you use



Accelerate software delivery with CloudBees CI.

AWS Marketplace is a digital catalog with thousands of software listings from independent software vendors that make it easy to test, buy, and deploy software that runs on AWS. Solutions are available through a wide variety of delivery methods.

Other benefits include:

- Ready-to-run software.
- Searchable catalog.
- Detailed usage tracking.
- Free trials.
- Simple procurement, no provisioning required.

### ESG Business Justification

- AWS Marketplace helps organizations adopt DevOps and DevSecOps to speed enterprise application development. AWS Quick Start for CloudBees CI, which includes integration with Amazon EKS, can help set up a CI environment in about 45 minutes.
- CloudBees CI centralizes management and control of Jenkins servers, developer tools, and pipelines. With additional enterprise features, CloudBees CI provides scalable automation and orchestration across teams, helping to improve efficiency, security and compliance.
- ESG noted how this solution can potentially increase the pace of software releases. We also noted that its defined security roles and credentials management can decrease enterprise risk

### Why CloudBees CI?



Increase developer productivity.



Reduce administrative overhead.



Improve code integrity and compliance.



Eliminate infrastructure limitations.

### The Bigger Truth

CloudBees CI, a DevOps platform that automates software delivery management, helps organizations do more with their existing developers and tools. Built-in security and compliance shorten an organization's journey to DevSecOps, which is on the minds of many decision makers. More than two-thirds of survey respondents expect that within two years, their organizations will secure more than half of their production cloud-native applications via DevSecOps practices.<sup>5</sup>

ESG believes the business justification for an AWS Marketplace CloudBees CI investment is clear. AWS Marketplace gets you to the cloud quickly and cost efficiently. AWS services that integrate with CloudBees CI provide additional ways for organizations to lower computing costs and extend Jenkins functionality. CloudBees CI helps expedite application development and product/service launches while reducing risk, increasing productivity, and simplifying governance.

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