# Five reasons why enterprises using Jenkins® adopt CloudBees CI

## OVERVIEW

With over 1,800 plugins, and a vibrant, growing community, it's clear Jenkins® is the world's leading open source automation server for continuous integration(CI) and continuous delivery (CD). Jenkins is extremely powerful and flexible which has powered its success in a diverse range of software development environments.

Enterprises can benefit from the flexibility and automation capabilities of Jenkins, but they have additional needs. They need to scale CI across their organization without increasing the administrative burden, as well as satisfy security and compliance requirements.

The answer is CloudBees CI - a solution built on Jenkins by the #1 corporate Jenkins sponsor, CloudBees. CloudBees CI is a unified governance engine for managing all of the CI automation needs of software development organizations practicing continuous integration. It leverages Jenkins, and adds centralized management of individual team projects/controllers, elastic scaling, compliance and security. Wrapped around all of this is expert Jenkins support for peace of mind. CloudBees CI brings the best of both worlds; central management for administrators of the Jenkins infrastructure with workload isolation and autonomy for developers so they can focus on innovating.

### Jenkins dominates the CI/CD space

» Over 70% of Java professionals surveyed use Jenkins*

» Over 1,800 Jenkins community plugins provide integrations with third-party technologies or add new capabilities.

As with all business-critical infrastructure, you need technical support and enterprise features to ensure on-time delivery with minimal risk.

*\* Global Market Insights, BusinessWire, Evans Data, Continuous Delivery Foundation, ASG Survey*

## 1. CENTRALIZED MANAGEMENT

Jenkins administrators can manage multiple controllers, projects and teams from a central console, greatly simplifying administrative tasks. Development teams can stand up their own Jenkins instance and tools while having the support and maintenance handled centrally by admins. Likewise, plugins can be managed centrally, ensuring that each team has the integrations they need without any platform stability concerns.

## 2. BUILT-IN SECURITY

Enterprises can onboard new projects and teams quickly, with a pre-configured security model available out of the box that supports single sign on. Role-based access controls allow for even finer control of access to pipelines and jobs. These and many other security features mitigate the risk that changes may make it to production unintentionally.

In addition to this, CloudBees CI provides a trusted, validated version of Jenkins and proactively addresses any vulnerabilities of open source with updates. Plugins are also tested for stability and security for use with the Jenkins build. If there is an issue with the build, it's easier for CloudBees to replicate and find a fix for it, therefore reducing the time and resources spent debugging the issue by administrators. If you plan to run CloudBees CI on Kubernetes, a signed security hardened container image is provided.

## 3. ELASTIC SCALING

CloudBees CI scales on two dimensions — at the infrastructure layer and at the organization layer. When CloudBees CI is hosted on a Kubernetes platform, it can leverage the elasticity and resilience of Kubernetes. Enterprises are no longer bottlenecked from running any number of tests or builds, even all at once. And if a controller resource is no longer needed and is at idle, it can hibernate and reduce any unwanted infrastructure cost to support it.  At the organization level, every developer team is on their own virtual Jenkins controller. This reduces infrastructure constraints and ensures that if a controller fails, the risk is isolated to just that project or team rather than an entire organization.

## 4. COMPLIANCE

CloudBees understands that enterprises with a mature CI practice are looking for higher levels of security and governance.  Proprietary features enable organizations to rapidly onboard teams following best practices following organizational standards and observing separation of duties models.  Development teams start with their own secure and isolated workspace pre-configured for their needs with approved, fully supported plugins and security settings. Standard team environments follow centrally managed, common configuration as code bundles that ensure security practices are being followed.  These bundles include centrally managed standard pipelines so that teams can focus on the code they are building to improve time to market while ensuring standard and secure practices are followed.

## 5. EXPERT SUPPORT

CloudBees is a proud sponsor of Jenkins. Our engineers lead many of the key initiatives for the community. Customers rely on CloudBees not just for technical on-demand help, but for best practices on driving DevOps adoption and access to online Jenkins training. And when you call on CloudBees for support, you are talking to a Jenkins specialist who uses and knows how the product works. Enterprises get peace of mind knowing that they have a stable CI environment for all their development workloads.
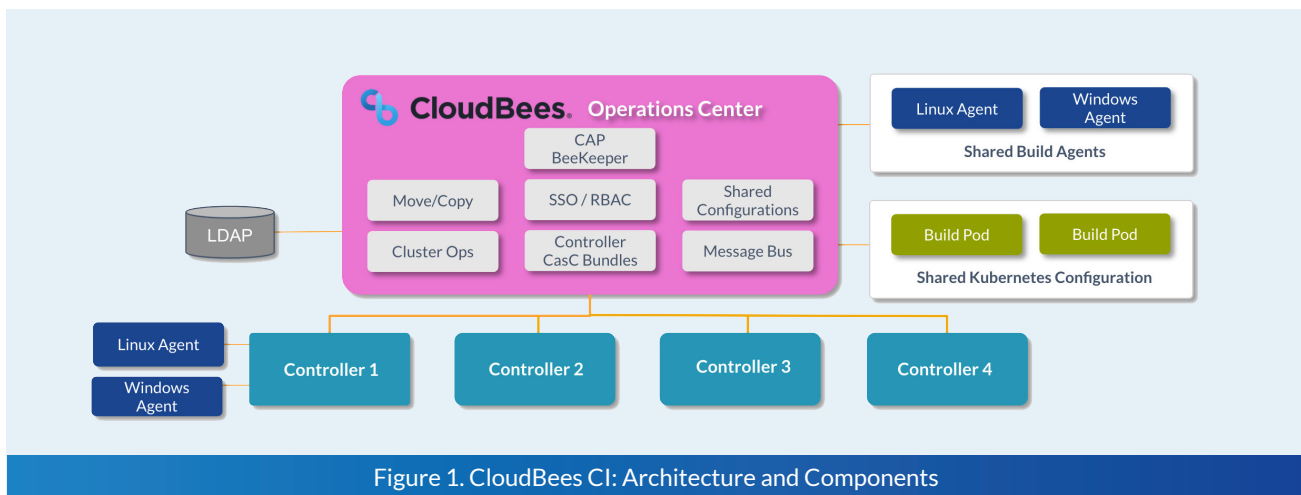


Figure 1. CloudBees CI: Architecture and Components