

GitLab vs Atlassian Bamboo

Decision Kit



Category	GitLab Score	GitLab Progress	Bamboo Score	Bamboo Progress	Missing in Bamboo
Manage	5.5/8	<div style="width: 69%;"></div>	3/8	<div style="width: 38%;"></div>	<ul style="list-style-type: none"> Subgroups Audit Events Audit Reports Compliance Management Code Analytics DevOps Reports Value Stream Management Insights
Plan	6/8	<div style="width: 75%;"></div>	4/8	<div style="width: 50%;"></div>	<ul style="list-style-type: none"> Issue Tracking Kanban Boards Time Tracking Epics Roadmaps Service Desk Requirements Management Quality Management
Create	7.5/8	<div style="width: 94%;"></div>	2/8	<div style="width: 25%;"></div>	<ul style="list-style-type: none"> Source Code Management Code Review Wiki Static Site Editor Web IDE Live Preview Snippets Design Management
Verify	6/8	<div style="width: 75%;"></div>	5/8	<div style="width: 63%;"></div>	<ul style="list-style-type: none"> Continuous Integration Code Quality Code Testing and Coverage Load Testing Web Performance Usability Testing Accessibility Testing Merge Trains
Package	4.5/6	<div style="width: 75%;"></div>	3/7	<div style="width: 43%;"></div>	<ul style="list-style-type: none"> Package Registry Container Registry Helm Chart Registry Dependency Proxy Jupyter Notebooks Git LFS Dependency Firewall
Secure	7/8	<div style="width: 88%;"></div>	4/8	<div style="width: 50%;"></div>	<ul style="list-style-type: none"> SAST DAST Fuzz Testing Dependency Scanning Container Scanning License Compliance Secret Detection Vulnerability Management
Release	7/8	<div style="width: 88%;"></div>	4/8	<div style="width: 50%;"></div>	<ul style="list-style-type: none"> Continuous Delivery Pages Review Apps Advanced Deployments Feature Flags Release Orchestration Release Evidence Secrets Management
Configure	4.5/7	<div style="width: 64%;"></div>	3/7	<div style="width: 43%;"></div>	<ul style="list-style-type: none"> Auto DevOps Kubernetes Configuration ChatOps Runbooks Serverless Infrastructure as Code Cluster Cost Optimization
Monitor	5/8	<div style="width: 63%;"></div>	4/8	<div style="width: 50%;"></div>	<ul style="list-style-type: none"> Metrics Alert Management Incident Management Logging Tracing Error Tracking Product Analytics Synthetic Monitoring
Defend	1.5/3	<div style="width: 50%;"></div>		<div style="width: 0%;"></div>	<ul style="list-style-type: none"> Web Application Firewall Container Host Security Container Network Security

Summary

Bamboo Server is a CI/CD solution which is part of the Atlassian suite of developer tools. It is available only in a self-managed configuration and is a closed source solution. Bamboo offers build, test, and deployment automation, and has tight integrations to Atlassian Bitbucket (for SCM) and Fisheye (for understanding how source code has changed), as well as integrations to over 150 other tools. In contrast, GitLab offers a git-based SCM, SCM integrations, and code change traceability out of the box in a single application.

Bamboo offers a GUI for defining build plans, and offers pipeline as code through Java and Yaml. Bamboo also offers deployment plans (which include the notion of environments and releases), pre-deployment visibility, and per-environment deployment permissions. GitLab also offers release tracking across environments and deep visibility into the changes in a deployment, but sets deployment permissions based on branch permissions.

Bamboo does not offer monitoring. GitLab includes monitoring as part of its single application.

Bamboo steps can be run in parallel across agents, and those agents can be auto-scaled based on need if Bamboo is configured for a feature called Elastic Bamboo. **Elastic Bamboo** requires the use of "remote agents", which you pay extra for (see [pricing](#)). Organizations who want auto-scaling are also locked in to using Amazon Elastic Compute Cloud (EC2) and paying Amazon separately for their usage. In contrast, GitLab does not charge per remote agent (runner) and scales with a variety of cloud and container solutions.

Cons

Gaps

- Extending the native functionality of Bamboo is done through plugins. Plugins are expensive to maintain, secure, and upgrade. In contrast, GitLab is [open core](#) and anyone can contribute changes directly to the codebase, which once merged would be automatically tested and maintained with every change.

Comments/Anecdotes

- Discussion from [HackerNews article about Atlassian not allowing benchmarking](#) > Atlassian has always forbidden to talk about the performance of their products in their ToS and in their previous EULA. We all know why, but we don't talk about it.
- From Twitter:
 - "we have also started using GitLab (moving from our own Bitbucket/Bamboo servers). The CI/CD is definitely an improvement but I'm not sold on the code review features of GitLab" <https://twitter.com/carrchr/status/1003651960099176448>
 - "Sweet. Unlike Atlassian's Bamboo, @GitLab CI supports "[ci skip]" out of the box. #gitlab #devtools #success" <https://twitter.com/tekkie/status/823689378371342336>
 - "Nice and simple GUI in @GitLab CI as well. Much easier to navigate than Bamboo for instance. #gitlab #gui #ux #success" <https://twitter.com/tekkie/status/839054544009117696>
 - "Seriously, is still there a reason to use Jenkins/Hudson/TeamCity/Bamboo? I reckon @GitLab built-in CI support is sufficient for most of us!" <https://twitter.com/AriyaHidayat/status/756919101587546112>
 - "A day building pipelines in VSTS for one of my teams. Get the feeling that while I find it simple not everyone finds it the same. Better than Gitlab CI (IMO) but I like Bamboo a lot too..." <https://twitter.com/xyglo/status/978291270161457152>
- From Bamboo open Issues
 - **Issue:** If I want to use git submodules then I shouldn't have to upload and configure SSH keys on each Bamboo Agent.
 - **Key text:** "Bamboo requires separate Git authentication for submodules. This involves either using HTTPS for submodules and providing the credentials through the job's environment variables, or configuring separate SSH keys on each build agent. Using HTTPS would render local builds unusable, requiring credentials every time. Adding SSH keys to every Bamboo agent is unmaintainable. . . . This reason, among others is a large part of why we have migrated away from Bamboo. We now use Gitlab and Gitlab CI for much better Docker and git support."
 - **Link:** [Bamboo Issue in Jira](#)

Resources

- [Atlassian Bamboo Website](#)

Pricing

- [Price page](#)
- [Bamboo Pricing Guide](#) (includes price additions for remote agents, and academic pricing)
- Small Teams - \$10/month - only 10 jobs and no remote agents
- Growing Teams - \$880/month - unlimited jobs, 1 remote agent
- pricing increase in tiers by # remote agents (1, 5, 10, 25, 100, 250, 500, 1000) (see [Bamboo Pricing Guide](#) for prices)
- First purchase includes perpetual software and 1 yr maintenance. Yearly cost for maintenance is approximately 50% of initial remote agent tier cost. (e.g. 1st year @25 remote agents = \$8,800, second year maintenance = \$4,400)

Feature Comparison

FEATURES



Built-in CI/CD

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GitLab has built-in Continuous Integration/Continuous Delivery, for free, no need to install it separately. Use it to build, test, and deploy your website (GitLab Pages) or webapp. The job results are displayed on merge requests for easy access.



[Learn more about CI/CD](#)

Runs with less memory and consumes less CPU power

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Uses little memory, it runs fine with 512MB. Uses little CPU power since Go is a compiled language

Application performance monitoring

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GitLab collects and displays performance metrics for deployed apps, leveraging Prometheus. Developers can determine the impact of a merge and keep an eye on their production systems, without leaving GitLab.



[Learn more about monitoring deployed apps](#)

GitLab Self-monitoring

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GitLab comes out of the box enabled for Prometheus monitoring with extensive instrumentation, making it easy to ensure your GitLab deployment is responsive and healthy.



[Learn more about GitLab self-monitoring](#)

Project Level Value Stream Analytics

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GitLab provides a dashboard that lets teams measure the time it takes to go from planning to monitoring. GitLab can provide this data because it has all the tools built-in: from the idea, to the CI, to code review, to deploy to production.



[Learn more about Value Stream Analytics](#)

Group Level Value Stream Analytics

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GitLab provides a group dashboard that lets teams measure the time it takes to go from planning to monitoring. GitLab can provide this data because it has all the tools built-in: from the idea, to the CI, to code review, to deploy to production.



[Learn more about Value Stream Analytics](#)

Preview your changes with Review Apps

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With GitLab CI/CD you can create a new environment for each one of your branches, speeding up your development process. Spin up dynamic environments for your merge requests with the ability to preview your branch in a live environment. Review Apps support both static and dynamic URLs.



[Learn more about Review Apps](#)

CI/CD Horizontal Autoscaling

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GitLab CI/CD cloud native architecture can easily scale horizontally by adding new nodes if the workload increases. GitLab Runners can automatically spin up and down new containers to ensure pipelines are processed immediately and minimize costs.



[Learn more about GitLab CI/CD Horizontal Autoscaling](#)

CI/CD Pipelines Dashboard

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Visualize the history and current status of pipelines across projects and groups all in a single dashboard that can be customized for each user.



[Learn more about Cross-Project Pipelines in the Operations Dashboard](#)

Cloud Native

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GitLab and its CI/CD is Cloud Native, purpose built for the cloud model. GitLab can be easily deployed on Kubernetes and used to deploy your application to Kubernetes with support out of the box.



[Kubernetes integration](#)

Container debugging with an integrated web terminal

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Easily debug your containers in any of your environments using the built-in GitLab Web Terminal. GitLab can open a terminal session directly from your environment if your application is deployed on Kubernetes. This is a very powerful feature where you can quickly debug issues without leaving the comfort of your web browser.



[Learn more about the web terminal](#)

Comprehensive pipeline graphs

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Pipelines can be complex structures with many sequential and parallel jobs. To make it a little easier to see what is going on, you can view a graph of a single pipeline and its status.



[Learn more about pipeline graphs](#)

Online visualization of HTML artifacts

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Access your test reports, code quality and coverage information directly from your browser, with no need to download them locally.



[Learn more about using job artifacts in your project](#)

Browsable artifacts

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With GitLab CI you can upload your job artifacts in GitLab itself without the need of an external service. Because of this, artifacts are also browsable through GitLab's web interface.



[Learn more about using job artifacts in your project](#)

Latest artifacts locked to prevent deletion

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The latest artifact of a successful job and pipeline on any active branch, MR, or tag is automatically locked to prevent being deleted. This makes it possible to set an aggressive expiration policy to clean up older artifacts, reduce disk space consumption, and ensure the latest artifact is always available.



[Learn more about job artifacts expiration](#)

Scheduled triggering of pipelines

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You can make your pipelines run on a schedule in a cron-like environment.



[Learn how to trigger pipelines on a schedule in GitLab](#)

Code Quality MR Widget

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Code Quality reports are available in the merge request widget area, giving you early insights into how the change will affect the health of your code before deciding if you want to accept it.



[Learn more about Code Quality](#)

Code Quality Reports

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Full Code Quality reports are available on the pipeline page, showing areas of the codebase that do not meet the organization's preferred style or standards.



[Learn more about Code Quality reports](#)

Multi-project pipeline graphs

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With multi-project pipeline graphs you can see how upstream and downstream pipelines are linked together for projects that are linked to others via triggers as part of a more complex design, as it is for micro-services architecture.



Protected variables

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You can mark a variable as "protected" to make it available only to jobs running on protected branches, therefore only authorized users can get access to it.



[Learn how to use protected variables](#)

Environments and deployments

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GitLab CI is capable of not only testing or building your projects, but also deploying them in your infrastructure, with the added benefit of giving you a way to track your deployments. Environments are like tags for your CI jobs, describing where code gets deployed.



[Learn more about environments](#)

Per-environment permissions

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Developers and QA can deploy to their own environments on demand while production stays locked down. Build engineers and ops teams spend less time servicing deploy requests, and can gate what goes into production.



[Learn about protected branches in GitLab](#)

Environments history

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Environments history allows you to see what is currently being deployed on your servers, and to access a detailed view for all the past deployments. From this list you can also re-deploy the current version, or even rollback an old stable one in case something went wrong.



[Learn more about history of an environment](#)

Environment-specific variables

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Limit the environment scope of a variable by defining which environments it can be available for.



[Learn how to configure environment-specific variables](#)

Group-level variables

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Define variables at the group level and use them in any project in the group.



[Learn how to configure variables](#)

Show code coverage rate for your pipelines

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GitLab is able to parse job output logs and search, via a customizable regex, any information created by tools like SimpleCov to get code coverage. Data is automatically available in the UI and also as a badge you can embed in any HTML page or publish using GitLab Pages.



[Learn how to generate and show code coverage information in GitLab](#)

Support for multiple Kubernetes clusters

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Easily deploy different environments, like Staging and Production, to different Kubernetes clusters. This allows to enforce strict data separation.



[Read more in the docs](#)

Bad test quarantine

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Don't let red builds become the norm. Across all tests, keep flaky or broken tests out of sight (but not out of mind), and keep the build green with one-click quarantine of tests.

[Read more on the issue](#)

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Why GitLab?

- Product
- Solutions
- Services
- DevOps lifecycle
- DevOps tools
- Is it any good?
- Releases
- Pricing
- Get started

Resources

- All resources
- All-Remote
- Blog
- Newsletter
- Events
- Webcasts
- Topics
- Training
- Docs
- Install

Community

- Customers
- Contribute
- Partners
- Channel Partners
- Explore repositories
- Source code
- Shop
- Direction
- Contributors
- Core Team
- Hall of fame
- Community Forum

Support

- Get help
- Contact Sales
- Contact Support
- Support options
- Status
- Customers portal

Company

- About
- What is GitLab?
- Jobs
- Culture
- Team
- Press
- Analysts
- Handbook
- Security
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