

GitLab Self-hosted vs. GitHub.com

GitLab compared to other tools



GitLab is the next-generation development toolset that covers 100% of your software development lifecycle.

GitLab unifies chat, issues, code review, CI, CD, and cycle analytics into a single UI. Unlike other source code management tools that only support a portion of your development lifecycle, GitLab delivers a unified experience for every step of the development lifecycle providing the most efficient approach to software delivery. So no matter what line of business you're in, GitLab gives you the edge to compete, innovate, and win.

FEATURES



Faster from Idea to Production

GitLab has a different approach to code development and deployment compared with GitHub. GitLab focuses on delivering a holistic solution that will see developers from idea to production seamlessly and on a single platform.

[Learn more about our vision](#)



Built-in Continuous Integration and Continuous Deployment

GitLab has built-in CI/CD, for free. GitHub has 3rd party CI/CD, which depends on GitHub, that are expensive if your projects are private.

[Documentation on CI](#)



CI/CD best practices

Everyone in your organization with GitLab is able to setup and manage CI/CD. GitHub and its external CI/CD encourages this knowledge to be restricted to a bunch of devops.



Free for private projects

GitLab is free for unlimited private projects. GitHub doesn't provide private projects for free.



More control during downtime

When GitHub is down, you have to wait for GitHub to make it available again. When your GitLab instance is down, everything is under your control.



You decide when you upgrade

GitLab releases a new version each month, and lets you choose when to upgrade. GitHub updates its product without you being able to do anything about it.



Flexible permissions

Set permissions according to people's role, rather than either read or write access to a repository. Don't share the source code with people that only need access to the issue tracker.

[See the various roles](#)



Innersourcing

Internal projects in GitLab allow you to promote innersourcing of your internal repositories.

[Find out more about innersourcing](#)



Work-in-Progress Protection

Simply add 'WIP' to the title of a merge request to prevent anyone from merging it. This gives you all the code review power of merge requests, while protecting unfinished work.

[WIP Merge documentation](#)



The best place for large open source projects

GitLab is meant to be the best place for any software project. The team behind GitLab is addressing issues that maintainers and contributors to large open source projects are facing, to make it easier to do both.

[Making GitLab better for large open source projects](#)



Powerful Issue Tracker

Quickly set the status, assignee or milestone for multiple issues at the same time or easily filter them on any properties. See milestones and issues across projects.



Due date

In GitLab, you can set a due date for individual issues. This is very convenient if you have small tasks with a specific deadline.

[Due dates documentation](#)



Move issues between projects

You can move issues between projects in GitLab. All links, history and comments will be copied and the original issue will reference the newly moved issue. This makes working with multiple issue trackers much easier.



Group-level milestones

View all the issues for the milestone youâ€™re currently working on across multiple projects.

[Example milestone for GitLab 8.2 \(need to be logged in\)](#)



Create new branches from Issues

In GitLab, you can quickly create a new branch from an issue on the issue tracker. It will include the issue number and title automatically, making it easy to track which branch belongs to which issue.

[See how in our documentation](#)



Assign multiple people to an issue / MR

GitHub allows you to assign multiple people to an issue or pull request. GitLab doesn't allow you to do this, but allows for approvals in merge requests, which offsets this there. For issues, GitLab does not have an equivalent feature, but a feature request has been submitted for this.

[GitLab issue to implement multiple assignees](#)



Allow edits from upstream maintainers in branch

In GitHub, when a user opens a pull request from a fork, they are given the option that allows the upstream repository contributors to collaborate with them on their new branch. GitLab allows you to restrict pushes very carefully, but does not have this option.

[GitLab issue to implement the same feature](#)



Cycle Analytics

GitLab provides a dashboard that lets teams measure the time it takes to go from an idea to production. 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. GitHub can't provide this data.

[Feature Highlight: Cycle Analytics](#)



Slash commands

GitLab provides a convenient way to change meta data of an issue or merge request without leaving the comment field with slash commands.

[Documentation about slash commands](#)



Issue board

GitHub has Projects, which are not tight to labels in any way, making it hard to automatize flows. GitLab has Issue boards. Each list of an issue board is based on a label that exists in your issue tracker. The Issue Board will therefore match the state of your issue tracker in a user friendly way.

[Feature highlight: Issue Boards](#)



Drag and drop tasks

You can change the order of tasks in markdown on GitHub. GitLab does not have this ability, but is considering implementing it.

[See the GitLab issue to implement this](#)



Time tracking

Time Tracking in GitLab lets your team add estimates and record time spent on issues and merge requests. GitHub doesn't have this feature out of the box.

[Check the Time tracking feature](#)



Built-in Docker Registry

GitLab Container Registry is a secure and private registry for Docker images. It allows for easy upload and download of images from GitLab CI. It is fully integrated with Git repository management.

[Documentation on Container Registry](#)



Monitoring built-in

GitLab ships with an open source monitoring solution, Prometheus, which offers world-class monitoring of the GitLab server's resources.

[Documentation about Monitoring](#)



New features every month

GitLab is updated with new features and improvements every month on the 22nd.

