



Jenkins



Semaphore vs Jenkins

- ✓ Modernize aging code delivery processes
- ✓ Accelerate deployment frequency with faster builds
- ✓ Free up developers' time for more valuable work

 NUMERATED

"I've been doing CI/CD for more than 15 years. Semaphore is hands-down the best product I've used. An incredibly flexible platform, but without the open-ended bloat of Jenkins. It's extremely intuitive and easy to navigate."

Ben Peterson, Principle Software Engineer



[Read full review](#)

Compare Semaphore vs Jenkins

	Semaphore	Jenkins
Product type	★★★★★	★★★★★
SaaS	✔ SaaS with autoscaling resources	✘ No
Hybrid	✔ Hybrid: run Semaphore agents on customer-managed infrastructure, use cloud-based UI	✔ Yes
Fully on-premises	✘ No	✔ Fully hosted and configured by the end user
Setup	★★★★★	★★★★★
Standard project set up in a few clicks	✔ Yes. Authenticate with Git provider, select repository, import repository as project	✘ No. Provision machines for CI/CD, install Jenkins on them, install plugins for Git integration and any additional functionality
GitHub support	✔ Yes	✔ Yes
Bitbucket support	✔ Yes	✔ Yes
Gitlab support	No. Pending	✔ Yes
Standardized product	✔ Yes. All users use the same product maintained by Semaphore	✘ No. Piece together functionality from plugins with varying syntax, documentation, and best practices
Graphical pipeline configuration	✔ Yes. Workflow Builder: point-and-click interface to create and edit pipelines	✘ No
Standardized configuration language	✔ Yes. Declarative YAML configuration for all features	✘ No. Multiple DSLs: pipelines are defined in one of two Groovy-based domain specific languages, one for simple declarative tasks, and one for more complex scripting
Command-line interface	✔ Yes. CLI can manage projects and do everything the UI can	✘ No. CLI limited to managing Jenkins instances
Ease of Maintenance	★★★★★	★★★★★
No maintenance required for hardware	✔ Yes	✘ No. End user maintains the machines
No maintenance required for platform software	✔ Yes. Official VMs and Docker images are refreshed weekly, include popular OSS tools out-of-the-box	✘ No. Requires dedicated person / team (SPOF)
No maintenance required for user-facing product	✔ Yes. All UI, including real-time and historical pipeline visualizations, logs, and test results is made and continuously improved by Semaphore	✘ No. End user maintains individual plugins with varying release cycles and support
Declarative configuration of services	✔ Yes. Supported via CLI	✘ No
Hot upgrades without downtime	✔ Yes. Use new product features as soon as they are released	✘ No. Troubleshoot plugins for interoperability and deal with breaking changes
Operating system support	★★★★★	★★★★★
Linux, macOS	✔ Yes	✔ Yes. Jenkins can run anywhere but end user must assemble their own hardware and software stack
Windows, ARM	✔ Yes. via self-hosted agents	



	Semaphore	Jenkins
Performance	★★★★★	★★★★★
Guaranteed desktop-grade performance	✔ Yes. in SaaS version	✘ No. Depends on user's choice and plugins
Autoscaling parallelism	✔ Yes. serverless model	✘ No. Manually add/remove machines and installations to scale capacity
Allocate more CPUs and RAM to complex jobs	✔ Yes. change one line of configuration	✘ No. Manually tweak plugins or upgrade machines to increase performance
Each job runs in a pristine, isolated environment	✔ Yes	✘ No. Jobs share disk space which may cause issues
Scalable dependency cache	✔ Yes	✘ No
Built-in artifacts store	✔ Yes	✘ No
Built-in Docker registry	✔ Yes	✘ No
Debugging feedback loop	✔ Yes. Fast debugging via SSH access to both running and finished jobs	✘ No. No direct SSH access to job environment, only log inspection
Permission management	★★★★★	★★★★★
Mirror permissions from GitHub	✔ Yes. via official GitHub App	✘ No. All users given full access by default
Role-based access	✔ Yes. Admins can limit access to deployment, secrets	✘ No. Manual setup of permissions
Okta / SAML for LDAP integration	✘ No. Only SaaS version supports Okta	✔ Yes. Okta / SAML for LDAP supported via plugin
Declarative configuration of permissions	✘ No	✘ No
Security	★★★★★	★★★★★
Application-level security	✔ Yes	✘ No. Single-layer of security around the fleet of Jenkins machines
Runtime isolation	✔ Yes	✘ No. Additional security created must be created manually
IP allow list	✔ Yes. via official GitHub App	✘ No. Depends on end user configuration
Audit logs	✔ Yes	✔ Yes. Available via plugin
ISO 27001 certificate	✘ No. Coming in	✘ No. No standard certification available, varying levels of security for OSS plugins, must be audited accordingly
SOC 2 certificate	✘ No. Pending	✘ No
Support	★★★★★	★★★★★
Email-based account and technical support	✔ Yes	✘ No
Video call support	✔ Yes	✘ No
Support SLAs	✔ Yes	✘ No
Custom solution engineering	✔ Yes	✘ No
Dedicated customer success manager	✔ Yes	✘ No
Private Slack channel	✔ Yes	✘ No
Licensing model		
	SaaS subscription: Semaphore provides a typical cloud computing pay-as-you-go plan and Enterprise plans with per-seat price	Jenkins is open source and free to use, but lack of support and maintenance add to total cost of ownership





“We eliminated waiting times at the end of each sprint, which were usually very challenging as we deploy a lot of changes on the last day, with Semaphore’s automatic CI scaling. We are now paying 38% of what we would be paying somewhere else and experience is great.”

Krzysztof Szromek, CTO @ Exlabs



[Read full review](#)

Speed up the feedback loop from idea to customer and back again



Remove obstacles to continuous delivery

With Jenkins, CI/CD is a black box locked in a silo. Without access, it’s hard for developers to focus on quality, shorten test cycles, and ensure safe deployment. With Semaphore, you get:

- Clutter-free UI
- Effective pipeline visualizations
- Help getting on board
- Support with continuous testing and deployment



Increase developer productivity & happiness

Create custom Semaphore screens that show deployment activity across multiple projects. With its intuitive UI and the Visual Workflow Builder, Semaphore makes it simple to build workflows, even for beginners. Savvy engineer? Make use of the .semaphore.yml file to build your CI/CD.

- Saves over 500 human hours per month (see whitepaper)
- Faster builds
- infinite on-demand capacity to test in parallel
- smart pipeline optimization features



Eliminate non-differentiating heavy lifting

There are entire books written about running Jenkins, and for a reason. It’s free to use but puts the burden of managing, securing, and scaling CI/CD squarely on your team. With Semaphore, you get:

- auto-scaling or hybrid cloud solution
- No maintenance
- More focus on building great products



Standardize CI/CD across teams and projects

Jenkins adoption is typically fragmented, with each team having their unique instance with challenges that include brittle configuration and outdated plugins. With Semaphore, you get:

- CI/CD configuration is stored as code
- runs on cloud native, iOS, and Android environments
- centralized permission management



Contact us for a demo and migration plan

[Book a call](#)

