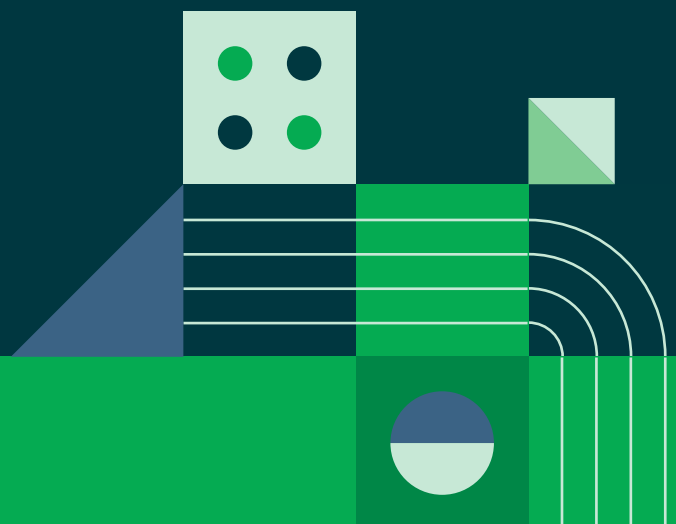




# 5 Reasons GitHub Actions Users Are Migrating to CircleCI



# Introduction

## CircleCI vs GitHub Actions

Organizations that choose GitHub Actions typically do so with the goal of minimizing CI/CD costs and consolidating to a single code-hosting and test automation platform. Yet opting for a low-cost add-on over a dedicated, best-in-class solution can have important consequences for team performance, from falling productivity levels to reduced product quality. Ultimately, these issues result in higher operating costs and longer time to market, threatening your organization's profitability.

Investing in CircleCI's full-featured CI/CD platform gives your team access to the industry's best tools for shipping high quality code quickly and safely, with minimal overhead. Our best-in-class tools give teams a crucial competitive advantage and lead to a 664% ROI over the course of three years.

Below, we'll look at five reasons GitHub Actions customers frequently cite for migrating their projects to CircleCI, and how doing so can lead to major improvements in your team's ability to create value for your customers and your organization.

**2M+**

Developers

**90K+**

organizations

**200K+**

orgs per month

## REASON 1

# Their business requires a mature and scalable CI/CD solution

GitHub Actions launched in 2018, making it a relative newcomer to the CI/CD landscape, with significant ground to make up compared to more established platforms. This experience gap, coupled with Actions' continued focus on supporting the most basic automation tasks, means successful teams quickly outgrow GitHub Actions' capabilities. Limited CPU/RAM options, lack of testing features and insights, slow builds, difficult debugging, and awkward integrations all contribute to a user experience that blocks effective delivery of complex software at scale.

### WHAT USERS HAVE TO SAY:



"Github actions are not a CI system. You can cobble one together out of actions, but I'm coming to the conclusion that this is the wrong choice for almost any project that has revenue."

Source: Twitter



"Given the popularity of GitHub actions in CI, it's interesting that there are so many longstanding unfixed limitations and bugs. Just a few:

1. No manual approvals (CD)
2. No way to dryrun/validate a workflow
3. Logs still don't refresh correctly on web
4. Missing release events"

Source: Twitter



"I migrated to @github actions betting that it will mature over time

But it just keep disappointing me

- YAML is not RFC compliant
- No step inputs
- Limitation on number of inputs

.....

It took it a whole year to have "re-run failed jobs"

Source: Twitter

## REASON 1

CircleCI has been an industry leader in CI/CD for over 12 years, helping more than 2 million developers run over 90 million jobs each month. Best-in-class CI/CD is and always has been the core of what we do – not an add-on or afterthought – and our platform is built to grow alongside you.

In 2023 GigaOm evaluated CI/CD providers based on scalability, performance, total cost of ownership, strategy & execution. In every category, CircleCI came out on top. In addition, GigaOm recognized CircleCI as an outperformer among CI/CD vendors for Kubernetes use cases. Not only does CircleCI provide a first-class CI/CD experience overall, but it offers exceptional performance when paired with other cutting edge solutions.

[View the GigaOm report](#)

With [the industry's best free plan](#), smaller teams can access advanced features like [test splitting](#), [templated workflows](#), and [SSH debugging](#) to accelerate time to market and gain critical edge on the competition. Larger orgs can take advantage of unlimited [concurrency](#), flexible [compute options](#), seamless [integrations](#), and deep visibility and control for fast, scalable, and secure workflows that support your unique business needs.

## TESTIMONIALS



“CircleCI has an incredibly low barrier to get started, but grows with you as your needs get more complex.”

**Brian Triplett**  
Director of Release  
Management at nCino



“What makes me most confident in CircleCI is knowing that I have full control over the process, and this platform can scale with whatever my needs are.”

**Josh Bazemore**  
Engineering Manager, Tools and  
Operations at Greenhouse



“We haven't seen the need to explore alternative CI/CD solutions. CircleCI is a robust cloud-based SaaS CI tool that does everything we need.”

**Jeremy Pfund**  
Principal Software Engineer  
at SevenRooms

## REASON 2

# They want the fastest CI/CD platform on the market

One of the top complaints from GitHub Actions users is slow build speeds. Limited caching and inefficient hosted runners cause frustrating delivery bottlenecks and costly developer downtime. Over time, these delays result in lost opportunities, increased developer costs, and reduced profits.

### WHAT USERS HAVE TO SAY:



“GitHub actions have taken more time in my life than my graduation. Why do engineers make things complicated?”

Source: Twitter



“I have no problem paying for @github Actions but the slowness of the macOS machines is just painful. I’m getting very close to just buying a mac mini and moving my builds there. To add insult to injury, macOS costs 10x their linux runners. Slow and expensive.”

Source: Twitter



“GitHub Actions hosted runner for macOS is super slow and always the bottle neck of workflows...”

Source: Twitter



“is it possible that github actions caching is slow”

The screenshot displays a list of GitHub issues related to slow cache retrieval speeds on self-hosted runners. The issues are as follows:

- Slow cache retrieval speeds on the self-hosted runners** (#1143) - closed 2 weeks ago
- Timeout when downloading cache blob** (#1141) - opened 3 weeks ago
- Cache save is too slow in container job** (#1126) - opened on Feb 27
- Intermittent timeouts downloading and unpacking cache** (#1121) - opened on Feb 21
- Restore multiple caches/files at once** (#1117) - closed on Feb 28
- macOS cache restore is extremely slow** (#1110) - opened on Feb 19
- Linux -> Mac & enableCrossOsArchive -> Cache not found for input keys** (#1110) - closed on Feb 21
- Cache save fails with Cygwin in PATH** (#1073) - closed on Mar 1
- Cache compression - cross OS support** (#984) - closed on Jan 12
- cache download is significantly slower on Mac agents than Linux agents** (#944) - closed on Jan 9
- Download speed on self-hosted runners is significantly slower** (#928) - closed on Jan 4
- Action can wait for at least 27 minutes when no progress is being made on the download** (#810) - opened on Jun 1, 2022
- Feature request: Add a flag for skipping post run cleanup** (#790) - closed on Jun 6, 2022
- Cache restoration is orders of magnitude slower on Windows compared to Linux** (#752) - opened on Mar 2, 2022
- Caching /nix/store is ok, but unable to restore it.** (#749) - closed on Sep 10, 2022
- Cache Not Found After Previous Successful Caching: Windows (latest)** (#735) - closed on Nov 7, 2022
- Uncompressing the cache is super slow** (#726) - closed on Feb 25, 2022
- Extremely slow cache on self-hosted from time to time** (#720) - opened on Jan 27, 2022
- [macos] Cache is extremely slow if executed after a booted iOS simulator?!** (#655) - closed on May 11, 2022
- Restoring cache on MacOS is extremely slow** (unnumbered)

Source: Twitter

## REASON 2

CircleCI offers delivery teams the fastest build speeds on the market, with workflows completing on average 40% faster than GitHub Actions. Don't just take our word for it: Even [GitLab acknowledges that](#) "CircleCI in particular is known for very fast startup times."

CircleCI's speed advantage doesn't stop at fast build speeds. From rapid feedback and alerts to streamlined troubleshooting with SSH reruns to effortless deployments and tight integrations with your favorite monitoring and observability tools, CircleCI supports team velocity throughout the delivery lifecycle.

The faster your workflows are, the faster your feedback loop is, and the faster you can ship value to your customers. With robust features including a variety of CPU/RAM options, pre-built convenience images, Docker layer caching, and intelligent test splitting, CircleCI gets you to your end result faster than any other CI/CD product.

## TESTIMONIALS



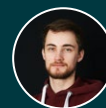
"Our time is money. Investing in CircleCI gives us time for more important projects."

**Donald Tyler**  
DevOps Technical Lead at  
HealthLabs.com



"We're an engineering and product-led company, so time to market for new features is very important. CircleCI allows us to have full confidence in getting product to customers quickly."

**Greg Cook**  
Engineering Manager at Oneflare



"Now we can have nearly 50 instances running in parallel in under 20 minutes. This has been a huge accomplishment with CircleCI."

**Timothy Nibeau**  
Head of Software Engineering  
at Baracoda

## REASON 3

# They have sophisticated workflows and require robust CI/CD to match

Many GitHub customers find that Actions does an adequate job of managing the basic git automation tasks and simple pipelines it was built to support, but it falters as their business grows and their requirements become more complex.

### WHAT USERS HAVE TO SAY:



"losing it at how bad GitHub Actions is if you want efficient, complex, or secure builds 👍"

Source: Twitter



"If he:

- breaks down for no reason
- starts and stops whenever he wants, even when you're running late
- can't follow simple instructions
- makes even simple errands complicated and take all day

he's not your toddler, he's Github Actions"

Source: Twitter



"Can we pause for a sec to appreciate how absolutely terrible GitHub Actions are? No YAML anchors&aliases, no non-secret configurable parameters, no manual deploys, and approvable deploys are available only for GitHub Enterprise and expire after 30 days."

Source: Twitter



"It is wild how quickly writing a set of GitHub Action workflows goes from "eh, it's fine" to a personal hell."

Source: Twitter



"after learning about circleci gha feels like a cruel joke"

Source: Twitter

## REASON 3

With seamless integrations and advanced features like dynamic configuration, matrix builds, scheduled pipelines, and test insights for efficiency; unlimited concurrency, M1 and ARM compute, and flexible execution environments for speed and power; and OIDC support and webhooks for flexibility and comprehensive support, CircleCI enables the world's best software teams to build workflows that are as innovative and responsive as they are.

CircleCI not only offers better support for complex pipelines and innovative use cases but also delivers newer features faster than GitHub Actions: In 2022, CircleCI had **60% more changelog updates** than GitHub Actions, ensuring CircleCI customers stay on the cutting edge of CI/CD. And with faster updates to our pre-built convenience images, you can rest assured that your team will never be left waiting to test against the latest versions of Linux, macOS, or Windows, keeping your innovation on track and your product miles ahead of the competition.

## TESTIMONIALS



“As we customize configurations, we’ve never found something that we can’t do in CircleCI.”

**Aram Greenman**  
Software Engineer at Karat



“CircleCI made it easier for us to streamline deployment processes and standardize the way we build, test, and release software.”

**Lukas Brusokas**  
Senior AWS Engineer at SaleCycle



“LaunchDarkly was built on CircleCI. It would have been very difficult to get to where we are now without its simplicity and power;”

**Andrew Brown**  
Senior Software Engineer  
at LaunchDarkly



## REASON 4

# They want a full-service CI/CD platform that will help their team grow and mature

GitHub Actions users have plenty of complaints about the user experience both on and off the platform. From frustrating design decisions to confusing documentation and unresponsive customer support, many engineering teams find it difficult to grow and progress their skills on the platform.

### WHAT USERS HAVE TO SAY:



“When it comes to docs @github actions is top 3 most disappointing. It feels like they were worked on by multiple teams, some didn't care and none talked to each other”

**Source:** Twitter



“The DX of github actions is so bad it's not even funny any more”

**Source:** Twitter



“I opened a support ticket with @github a week ago and I've gotten no response.

So, I switched CI from GitHub Actions to @CircleCI. I got my problem solved with very little friction and I'm very impressed with the tools -- especially being able to run workflows locally.”

**Source:** Twitter

## REASON 4

CircleCI is committed to supporting and encouraging continuous improvement among our users. With 24x7 support and customized training options, we ensure teams onboard quickly and can learn new tools and techniques from CI/CD experts dedicated to their success. Our [extensive documentation](#), deep library of [tutorials and educational blog posts](#), active [user community](#), and comprehensive [learning portal](#) mean users always have the information they need to elevate their delivery practice right at their fingertips.

Teams also get rapid, actionable feedback on their pipeline performance, test quality, and credit usage from the CircleCI [Insights dashboard](#), giving them the ability to make informed decisions, predict costs, and optimize their pipelines according to their business priorities.

## TESTIMONIALS



“CircleCI and AWS have helped us automate and scale our platform. The support we received has inspired us to continue building out our platform, gain more insights from our data, and serve more customers.”

**Henrik Helenius**  
Co-founder at Droppe



“With the process changes and automation improvements that CircleCI helped us introduce, we’ve gone from just one deployment every two weeks to eight deployments every day – a 64X improvement.”

**Fergus McDonald**  
Senior Site Reliability Engineer  
at Procurify



“When running into performance troubles, adding new containers was a piece of cake. Every issue that I came across was quickly solvable, even when I needed technical support from the CircleCI team. The initial configuration was just a charm.”

**Peter Tilsen**  
CTO at Uniplaces

## REASON 5

# They want flexibility rather than vendor lock-in

As a Microsoft-owned service, GitHub Actions actively inhibits users from accessing non-Microsoft tools. Code changes can only be validated from GitHub, and all cloud runners are hosted on Microsoft Azure-based virtual machines. Organizations that want to avoid vendor lock-in are often wary of consolidating all of their development pipeline (and costs!) under one corporate ecosystem, particularly with the emergence of [multicloud adoption](#) as a growing resilience strategy among delivery teams.

### WHAT USERS HAVE TO SAY:



Moving to GitHub Actions - an important reflection

#### **The Whole Thing is a Massive Lock-in System**

GitHub Actions were essentially built to have people writing their CI/CD systems (which are key to build, ship and distribute apps) based on a system (GitHub) that does not work elsewhere - thus the vendor lock-in.

You cannot take your actions and reproduce it elsewhere, not even locally. The underlying principal of re-using actions (use: actions/checkout@v4, for instance) makes a change to another system a highly expensive one, because it's not about doing a couple tweaks, like adding a git checkout call in your new system - one would have to design the entire system from scratch because you would be missing a awful lot of these steps along the way in your CI/CD process.

**Source:** [gsilvapt.me](#)



"Yet to wrap my head around the fact when organizations say avoid vendor lockin and choose to adopt github actions. I am sure there are some very good reasons."

**Source:** Twitter

## REASON 5

CircleCI is an independent platform with equal support for all major version control services, programming languages, test frameworks, and cloud platforms. Our extensive [partner ecosystem](#) is built to accommodate your team's needs, no matter which tools are important to you. With more than 185 certified and third-party integrations in our partner library, we offer the largest selection of integrations of any CI/CD provider on the market.

CircleCI also makes it fast and easy to incorporate third-party tools into your workflows. Orbs are reusable packages of parameterized config built by our technology partners and community members that allow you to incorporate complex jobs and commands with just a few lines of configuration. Automate your infrastructure, deploy your app to Kubernetes, incorporate comprehensive SAST and DAST security scans, and much more, with simple integrations using CircleCI orbs.

## TESTIMONIALS



“CircleCI’s CI application spins up, builds fast, and fits based on each team’s use case. Compared to others, it’s much more flexible for testing and incredibly easy to use for integrations.”

**Jon Anderson**  
Senior Software Engineer  
at Outreach



“CircleCI helps us pivot more quickly when business priorities shift. We can easily scale the workflow using parallelism or caching, with no extra overhead.”

**Carlos Villavicencio**  
Software Developer  
at Stack Builders



“CI/CD is critical for success for all companies, but there are a lot of ways to do it. CircleCI allows us to easily and quickly get projects onboarded and connect them with other parts of the tech stack.”

**Ahmad Fikri**  
Head of Platform  
at Tunaiku

# Conclusion

## Join the millions of happy developers building faster and more reliably with CircleCI

From speed and scalability to flexibility and ease of use, CircleCI gives development teams the tools they need to optimize delivery processes, drive business value, and stay ahead of customer needs. Don't let ineffective low-cost alternatives limit productivity and innovation in your organization. Get the most out of your CI/CD investment and build for your future with CircleCI.

To get started, [sign up](#) for a free account or [contact us](#) for a personalized demo today.





CircleCI is the world's largest shared continuous integration and continuous delivery (CI/CD) platform, and the central hub where code moves from idea to delivery. As one of the most-used DevOps tools, CircleCI has unique access to data on how engineering teams work, and how their code runs. [www.circleci.com](https://www.circleci.com)

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