

How to Ship 1000+ Commits to a Rails Monolith Daily

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Number guessing game

200+

500 / 2 ' 500

8

30

18

1752

Number guessing game

- **8** - Lowest number of commits last year, on 25th of December 2024
- **18** - deploys groups yesterday (11th of December)
- **30** - max PRs in a merge group
- **200+** - CI checks
- **1752** - highest number of commits per day in monolith in first half a year of 2025, 26th of March
- **500/2,500** - 500 engineers merge 2,500 pull requests monthly (number from a year ago)



Hi, I'm Hana



???

My questions for you

*Shipping fast is not magic
—
it's process, culture, and
tooling*

What you'll hear today

1. Small changes for fast deploys
2. Testing
3. Deploys
4. How we shipped Autofix API

Make changes easy to review



Make changes easy to review

1. Ship small PRs
2. Add print screen/screen recordings of changes
3. Good PR description
4. Review your own PR

Ship small



Feature flags



Local Testing & Review Lab

Local tests (Codespaces)

- Unit and integration tests
- Running Rails server to do manual testing

Review lab aka branch deployments

- Deploy of a specific branch
- Unique URL
- Connected to production database
- Enables testing with real data
- Time limited

CI Checks



CI Checks

- Static analysis (CodeQL) to check for security vulnerabilities
- Feature-flag awareness (all on)
- Different environments
- OpenAPI
- Code and service owners

CI Checks

- Unit/integration tests
- Linter
- Sorbet
- Others, like dead code, PR size

Deploys

Merge queue

- Running CI
- Max 30 PRs in a group
- People are expected to watch the deploy
- Fully integrated with PR experience

Pipeline Overview

- Deploy to canary
- Deploy to staff cloud
- 2%
- 5xx, timeouts stop
- 5%
- Production deploy
- Deploy to different cloud regions
- Merge

Observability

Automatic

- Detect and stop issues early
- Auto-pause and auto-rollback

Human

- Check for problems (Datadog, Sentry)



ChatOps

- Slack integration
- Review lab deploys
- Queue for deploy
- Posts information about deploy and exceptions
- Retries



Rollback

- One click
- Automatic
- Deploy main
- Short version of a deploy
- Jumped and solo deploys

First deploy,
then merge

Merge queue in practice

Deploying

- Enqueue PR in the 
- Handovers 
- Other work to do during a deploy

Autofix public API for historical alerts

Autofix public API

- 
- 3 endpoints
 - Get
 - Create
 - Commit
- 10 PRs
- 2.5 weeks



How can you use what
you learned today?

What's one thing you
can change or
introduce?

Happy deploys





you may want to read

- [Docs: Managing a merge queue](#)
- [Blog: How GitHub uses Merge Queue](#)
- [Blog: Building GitHub with Ruby and Rails](#)
- [Blog: Enabling branch deploys](#)
- [Repo: Branch deploy Action](#)
- [Blog: 5 things to ship more secure](#)

Thank you! Let's stay in touch 😊



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Q & A



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