

making awesome automations with **GitHub** **Actions**

Beatriz Milz

rstudio::conf 2022 | July 2022

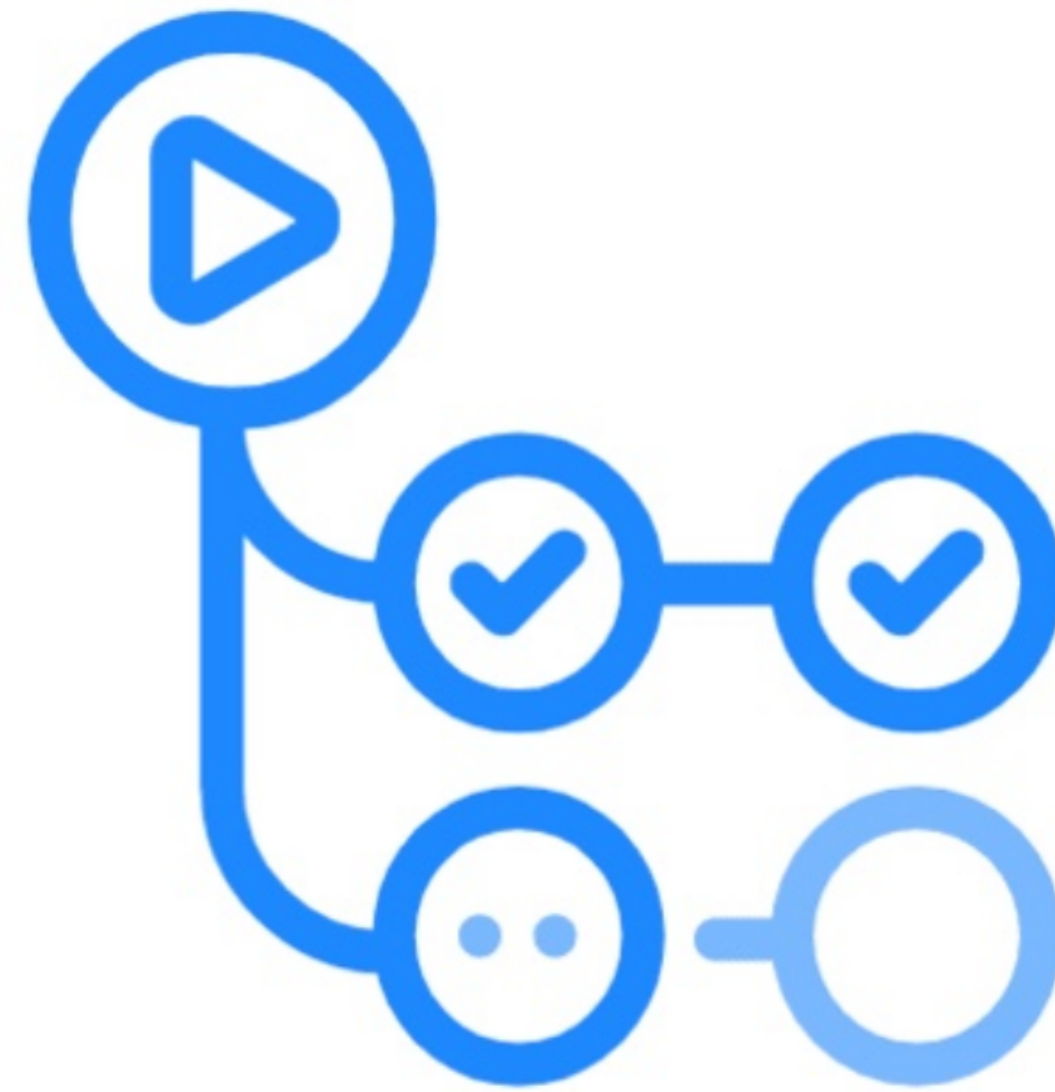
Slides:

beatrizmilz.github.io/rstudioconf2022

Run scripts... 
every day?

every week?

every month?



GitHub Actions

Logo of GitHub Actions

What is GitHub Actions?

How can we run R Scripts with it?

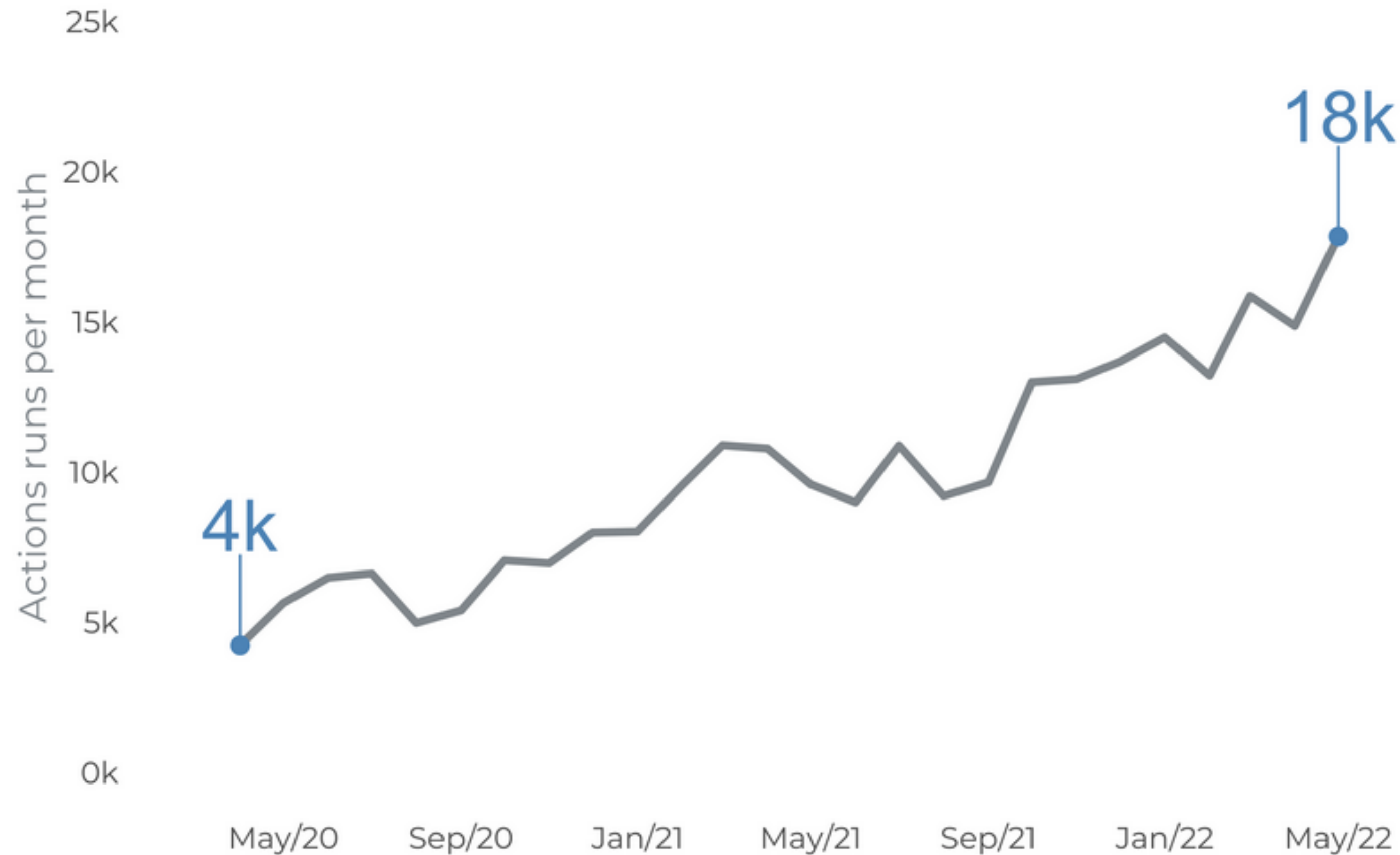
R packages

```
1 # Load usethis  
2 library(usethis)  
3 # run check  
4 use_github_action("check-standard")  
5 # build pkgdown site  
6 use_github_action("pkgdown")
```

See other examples in: github.com/r-lib/actions/

How important is GHA to RStudio?

Actions runs by RStudio's organizations on GitHub



Plot made by @BeaMilz. Data from the GitHub API.

- Completed action runs
- Public repositories from:
 - [rstudio](#)
 - [tidyverse](#)
 - [r-lib](#)
 - [mlverse](#)
 - [tidymodels](#)
 - [quarto-dev](#)

What else can we do?

Run arbitrary R scripts

- Scrape data from the internet
- Run reports with RMarkdown or Quarto
- Send emails
- Save results


```
1 on: # what triggers the workflow?
2   workflow_dispatch: # start when pressing a button
3   schedule:
4     - cron: "0 0 * * *" # run everyday
5
6 name: execute-r-script # name of the workflow
7
8 jobs: # what the workflow should do?
9   execute-r-script:
10     runs-on: ubuntu-latest # Run on Ubuntu
11     steps:
12       - uses: actions/checkout@v3
13       - uses: r-lib/actions/setup-r@v2 # Install R
14       with:
15         use-public-rspm: true
16       - name: run-script
17         run: Rscript my_awesome_R_script.R # Run R script
```

```
1 on: # what triggers the workflow?
2   workflow_dispatch: # start when pressing a button
3   schedule:
4     - cron: "0 0 * * *" # run everyday
5
6 name: execute-r-script # name of the workflow
7
8 jobs: # what the workflow should do?
9   execute-r-script:
10     runs-on: ubuntu-latest # Run on Ubuntu
11     steps:
12       - uses: actions/checkout@v3
13       - uses: r-lib/actions/setup-r@v2 # Install R
14       with:
15         use-public-rspm: true
16       - name: run-script
17         run: Rscript my_awesome_R_script.R # Run R script
```

```
1 on: # what triggers the workflow?
2   workflow_dispatch: # start when pressing a button
3   schedule:
4     - cron: "0 0 * * *" # run everyday
5
6 name: execute-r-script # name of the workflow
7
8 jobs: # what the workflow should do?
9   execute-r-script:
10     runs-on: ubuntu-latest # Run on Ubuntu
11     steps:
12       - uses: actions/checkout@v3
13       - uses: r-lib/actions/setup-r@v2 # Install R
14       with:
15         use-public-rspm: true
16       - name: run-script
17         run: Rscript my_awesome_R_script.R # Run R script
```


More examples...

The screenshot shows a web page with a purple header. The header contains the text 'BEA MILZ' on the left and navigation links 'Beatriz Milz', 'Posts', 'Series', 'Talks', 'Resume', 'GitHub Sponsors', and social media icons on the right. The main content area has a title 'GitHub Actions Series: Making awesome automations' and a subtitle 'Here is a list of posts about GitHub Actions'. Below this, a paragraph explains that the series is complementary material for a talk at the RStudio Conference. A 'Categories' sidebar on the right lists 'Automations', 'Git', 'GitHub', and 'GitHub Actions'. The 'Posts in English' section features a post titled 'Introduction to GitHub Actions to R users' by Beatriz Milz, dated June 30, 2022. The post includes a brief description and tags for 'GIT', 'GITHUB', 'GITHUB ACTIONS', and 'AUTOMATIONS'. A thumbnail image of the RStudio Conference poster is also shown. The 'Posts em Português' section is partially visible below.

<https://beamilz.com/series-gha.html>

Thanks!

- [RStudio](#) - Thanks for the Diversity Scholarship!
- [R-Ladies São Paulo](#) and [R-Ladies Global](#)
- [Curso-R](#) and [Julio Trecenti](#), [Daniel Falbel](#), [Athos Damiani](#)
- Creators and contributors of [r-lib/actions](#)
- [Articulation Inc.](#)

Beatriz Milz 🇧🇷

- Contact
 - Twitter: [@BeaMilz](https://twitter.com/BeaMilz)
 - Blog: beamilz.com
- About Bea
 - R-Ladies São Paulo Co-organizer
 - Teacher at [Curso-R](#)
 - Tidyverse instructor certified by RStudio

