## FTCFOSS-Guide

Yani and Steffi

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### 1 Preface

# Community-Driven Open Source: Enabling First-Time Contributors to Open Source Projects

Over the last decade, rOpenSci has played a pivotal role in diversifying the open research software community by integrating new developers from underrepresented communities and transforming newcomers into regular contributors to our federation of scientific software via various engagement channels.

To further this work, in 2024 we proposed to pilot a new program designed to support sustainability for scientific software packages by recruiting and mentoring contributors and co-maintainers, using community calls and coworking sessions (mini-hackathons and mini-translathons) to provide a structured yet flexible environment to onboard new participants to open-source projects in real-time.

This book presents the lessons learned and the organization details of these events. While instructions and notes are presented within an rOpenSci context, we hope that they are clear enough that they could be adapted as a model for use in other organizations. The format has been designed to be scalable across our federation of scientific open source software and we hope will serve as a model for maintainers to replicate in recruiting contributors and comaintainers.

If you find any errors or things that need clarification, we would be grateful if you opened an issue or pull request in the repository for this book.

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### 2 Introduction

Making your first contribution to Open Source can be both empowering and yet very intimidating. Therefore, to encourage and empower contributors, we created a new type of community event which supports specifically first-time contributors to open source software and translation projects. Our goal was to create an inclusive and supportive evironment, which would result in a positive learning experience and empower participants to continue contributing.

We designed and piloted this new community event format based on pairing community calls to introduce the topics, and specialized hands-on coworking sessions (mini-translathons and mini-hackathons) to give opportunities for participation.

rOpenSci Community Calls are 1-hour online events with 2-5 speakers, 1 moderator, and include 20-40 minutes of discussion/Q&A. These calls serve to strengthen connections between members of the rOpenSci community, teach technical and social topics, bring different stake-holders' perspectives to light, and identify unmet needs on a topic. Video, transcripts, notes and summaries of all our calls are published. We have hosted over 40 calls over the last 10 years and attract a global audience with representation from academia, government, non-profit, and industry. We have also started holding these events in Spanish (as of 2023) and Portuguese (as of 2024) to expand global accessibility.

Coworking sessions are informal, online, gatherings held once a month in rotating timezones. Each session features a different theme and Community Host with expertise in that theme, facilitated by rOpenSci staff. At these events, participants meet other scientific software developers and experts, cowork on their own projects, and/or ask questions and receive guidance as they work. After each session we publish shared notes and resources. We have hosted over 40 sessions since 2021.

This book presents the experiences we learned through our pilot events, an overview of how to run these kinds of events, and specific details on how to run the community calls, minitranslathons, and mini-hackathons. In the Appendices we share examples and templates useful for running these events.

### 3 Pilot

In 2024/2025 we hosted two sets of paired events to support first time contributors to open source software.

The first set of events were designed to support first-time contributors to **open source translation projects**, using rOpenSci's Portugese translation projects as an example. To this end, in November 2024 we hosted a Portugese Community Call (A comunidade R fala português) followed by a mini-translathon at LatinR.

The second set of events were designed to support first-time contributors to **open source R packages**. In Januaray 2025 we hosted an English Community Call (From Novice to Contributor: Making and Supporting First-Time Contributions to FOSS), followed by two mini-hackathon coworking sessions in February and March.

In this chapter we will discuss some of the feedback and lessons learned from this first set of events. To learn more about organizing these events, see the following chapters.

### 3.1 Feedback

As part of each hands-on mini-translathon or mini-hackathon, participants completed an optional feedback survey collecting insights on their experiences, what they enjoyed and suggestions for improvement.

### 3.1.1 Translathons

As part of the translation efforts, we organized a mini-hackathon focused on reviewing existing Portuguese translations and introducing participants to the review workflow. The event was divided into two main parts: a walkthrough of the translation review process and hands-on sessions where participants practiced doing reviews.

Participants expressed that they enjoyed the opportunity to contribute and valued the chance to learn more about using GitHub. Many highlighted that learning the review process helped them contribute to this project and gave them skills and ideas they plan to apply in other open-source and localization projects. There was a suggestion to support other R-related translation projects.

Most participants also mentioned that organizing this event in collaboration with the LatinR Conference was especially meaningful. It created a space to collaborate with others across the region and contribute to something that brings value to the broader Latin American community.

One key suggestion that emerged was the importance of documenting shared agreements—especially on how to translate technical terms consistently. Having a reference guide or glossary would support current and future contributors in maintaining coherence across translations.

The enthusiasm sparked during the hackathon continued after the event, with several participants actively engaging in translation and review work in Slack and GitHub. Their commitment and motivation reflect the impact of creating inclusive, hands-on spaces for collaboration and learning.

#### 3.1.2 Mini-hackathons

Briefly, mini-hackathon coworking sessions were designed as an online event with mentors and participants. We started with introductions, then had two periods for coworking separated by a break. During coworking, we had breakout rooms to discuss different topics, and ask questions. For more details, see the Chapter on Mini-hackathons.

In summary, participants reported that they appreciated the mentorship & support, learning opportunities, social aspects, and organization of the event. One participant suggested we conduct more hackathons during our regularly scheduled coworking sessions.

Specifically, participants enjoyed

- having direct mentorship during the process (with many mentors),
- having the opportunity to listen to the questions asked by others,
- learning about the contribution process
- finishing a Pull Request
- meeting people from different countries,
- having support in multiple languages,
- the friendly atmosphere
- the way the coworking session was organized and scheduled
- the use of breakout rooms

Participants were also asked for suggestions for improvement. In summary, they suggested having more issues/tasks, more language opportunities, better organization of issues/tasks with respect to the experience and setup required to complete them, and finally, more training materials to help participants get started.

Specifically, participants suggested

• More issues to address

- Making aspects of the introduction bilingual to ensure everyone understands the instructions
- Hosting topic or domain-specific events to tap into enthousiastic users in these fields (similar to translathosn)
- Partnering with other organizations involved in specific domains which could host parallel sessions
- Including more detailed material on the steps required to make and test a contribution
- Considering what build tools participants might need to be familiar with to execute certain tasks
- Providing training material/opportunities before the sessions which would cover build tools
- Helping maintainers consider the complexity of tasks they recommend for this event
  - how many files need to be changed, and whether or not code needs to be run/built
  - which tasks are more/less suitable for different types of participant experiences

### 3.2 Takeaways / Future ideas

Based on the official feedback and the trends and details organizers observed themselves during the events, we have some general takeaways and ideas for future events.

#### 3.2.1 Translathons

For the **translathons** one of the suggestion was to organize events focused on translating resources into more languages. Before expanding to more languages, our priority is to consolidate our work in Spanish and Portuguese. We will continue improving and maintaining translations in these two languages to ensure quality and consistency.

We plan to organize more translathons, ideally in collaboration with other R community initiatives. Working together will allow us to share a common glossary and community language agreements, strengthening the overall translation effort. Organizing these events alongside other conferences or with communities like R-Ladies chapters or other R User Groups could help broaden participation.

Having the GitHub project listing Pull Requests which needed translation work (labelled by translation status) was very helpful to organize how participants chose what to work on, but even with this tool, some people accidentally started working on PRs already in use by another. This signalled to us that we need to be more clear on the process of assigning a PR to a reviewer.

After the event, contributors often continue their work asynchronously, supported by ongoing discussions and updates in our Slack multilingual channel, where people share progress, ask questions, and collaborate. To support ongoing work, we're considering regular traslathon

meetings at a fixed time where people can join to learn, collaborate, and contribute to active translation projects.

### 3.2.2 Mini-hackathons

For the mini-hackathons, while we had originally expected to have many participants new to GitHub, in reality most participants were familiar with GitHub in general, but were unfamiliar with **collaborating on GitHub**. They knew how to make and push commits, but wanted to learn how to make Pull Requests and how that process worked. They were also interested in understanding the etiquette and workflow of making contributions.

Further, many participants were very familiar with coding in R (or other programming languages), but were not familiar with **R package development** (i.e. working with the package structure, using development tools, testing interactively, and using formal unit tests).

Adding breakout room topics such as "build tools in R" and "collaborating on GitHub" could be a simple way to help participants get support on these topics. Developing a simple "Getting started" guide or workshop to share with participants before the event could be another method for participants who prefer to have a more formal set of instructions.

It took time for participants to decide on an issue, and there was the sense sometimes that they felt a bit rushed. If possible, it might therefore be nice to share the GitHub Issues Project Board with participants *before* the start of coworking, so they have more time to explore the issues and think about what they would like to tackle.

As suggested by one participant, it could also be interesting to try organizing these events with other groups for domain-specific software. This could help build capacity in specific domains and strengthen ties among communities.

rOpenSci staff also had suggestions, such as to consider using mini-hackathons to support/encourage/find new maintainers for rOpenSci packages, to invite Champions to attend, and to explore collaborations with other organizations.

All in all, these mini-hackathons were well received and the helpful feedback submitted indicates that participants are engaged and want to help improve and refine the format.

## **4 Events Overview**

Here we have a rough overview of the projected timeline for running a set of events. One set of events consists of a Community Call paired with 1-2 hands-on mini-hackathons or mini-translathons.

See the relevant chapter for specific details for organizing a specific event type.

### 4.1 Timeline

Chp	Task	Platform
2	Contact potential panelists and moderators for Community	Email etc.
_	Call	
2	Choose date for Community call with participants' input	
2	Advertise Community call	Website / Social
		Media
5/6	Choose date(s) for mini-translathon/hackathon	
5/6	Open call for mentors/maintainers at hands-on events	Blog / Registration
$\frac{5}{6}$	Advertise Mini-translathon(s)/hackathon(s)	Website / Social
,		Media
5/6	Open call for participants at hands-on event(s)	Blog / Registration
2	Run Community Call	Zoom / Docs
5/6	Run mini-translathon(s)/hackathon(s)	Zoom / Docs
5/6	Evaluate participant feedback	, 

## 5 Community Calls

rOpenSci Community Calls are Zoom calls held several times a year featuring a panel of speakers on a specific topic with a significant Question & Answer period. Calls cover a variety of topics, from technical ("A Journey through Arrow in R") to community ("Set Up Your Package to Foster a Community"). Most topics are in English, but we are introducing Calls in Spanish ("Proyecto Multilingüe") as well as in Portuguese ("A comunidade R fala português", part of this Pilot).

For general organizing, see our blog post "How rOpenSci Runs Community Calls" as well as our "Checklist for a Community Call".

In this chapter we will address the specifics of running a Community Call to support first time contributors to open source software.

### 5.1 Communication

This communication project connects our community calls with the mini-hackathon or minitranslathons that follow. Each channel is used to build momentum, share stories, and invite participation.

We create a event page in our website under Community Calls to share the main information of the event:

- Date
- How to join
- Speakers + Bio
- Resources

The event page is shared through our communications channels:

• Newsletter: Our newsletter has around 2500 registered readers. We shared all upcoming community calls in our HQ section and the resources (like video, articles and slides) after the call.

- Social Media: Before the call, we use social media posts to announce the theme and raise awareness. We set the same agenda for all community calls: a "Save the date" announcement a month before, a reminder one week before the event, one day before the event and one hour before the call. During the community call, we live-post under a dedicated hashtag (#translathon and #rohackathon2025), sharing screenshots, participant quotes, and quick updates to capture the energy of the event. After the call, we post highlights and linked to the recap blog, while beginning a countdown to the hackathon.
- **Slack**: Ahead of the call, we post reminders and spark conversation about the event theme using different prompts, for example:
  - "Do you remember your first time contribution...?"
  - "Do you remember the first time you helped someone contribute...?"

These short stories added a personal touch to our communications and inspired people to join the events.

The "Save the date" announcement is also shared in the Slack workspaces of several communities which may be interested in the events, like R-Ladies, R-Devel and LatinR.

• Forums: We also post the Community Call in the event category in several forums related with the topic, like The Carpentries Discuss, Posit Community and Sustain Forum. We share a short summary, the speakers and the link to the event page in these posts.

### 6 Mini-translathon

### 6.1 Overview

Translathons are 2-hour events designed as a combination of translation with the ways and energy of a hackathon (a dedicated period of time where participants make contributions to selected FOSS projects). Translathons are live and synchronous: participants contribute, learn, and connect with others. Plan a community call to provide guidance on how to get started with translation contributions and different translations and localization efforts that exist for a human language in the community. rOpenSci staff prepare the event by identifying materials in need of translation or review, creating and labeling pull requests for participants to work on, and setting up a GitHub Project board to track progress. During the event, after a brief introduction on how the event is structured and how the translation process works, participants select a pull request to work on. Mentors and editors provide real-time support in breakout rooms or the main room. All contributors are also added to the multilingual channel in the rOpenSci Slack, where they can continue discussing and refining translations after the event.

During and after the event, participants are invited to complete an optional feedback survey collecting insights on their experiences, challenges faced, and suggestions for improvement.

### 6.2 Mentors and Editors

The main goal of translathon events is to ensure participants have a good experience:

- learning how to contribute to translations,
- gaining confidence in the process, and
- building motivation to continue contributing beyond the event.

To achieve this, translathons rely on two key roles:

• Mentors: contributors familiar with the translation process, tools, and community guidelines. They help participants get started, troubleshoot issues, and guide them through the workflow.

• Editors: experienced translators responsible for reviewing and maintaining the quality and consistency of translations. Editors check terminology, style, and adherence to the community's translation agreements.

Mentors and Editors sign up to participate beforehand and review the translation process and rules, and the translations that need contributions. They are preferably people who have already contributed, as reviewers or editors, to rOpenSci's translations and know how the tools used in the process work and are also aware of the translation agreements for the language involved (for example, the Spanish agreements)

Because preparing and reviewing translations requires additional effort, we suggest offering mentors and editors an honorarium to recognize their time and contributions.

In our 2024 pilot, the translathon was hosted in Portuguese in conjunction with LatinR, where many members of the Latin American R community gathered. We focused on translating one resource: rOpenSci Packages: Development, Maintenance, and Peer Review. NumFocus provided the funding to pay mentors and editors a \$200 USD honorarium for participating in the translathon.

### 6.3 Timeline

See Events Overview for the full timeline of paired events.

The timeline is setup for a single event, but repeat events are easy to insert.

Table 6.1: Approximate timeline of tasks

Weeks		
Before	Task	Platform
10	Choose date for translathon or an event to joint organization.	
8	Open call for mentors/editors at hands-on events	Blog / Registration/ Social
4–6	Open call for participants at translathon(s).	Blog / Registration (may vary if organized jointly with another event) / Social (include Slack workspaces)

Weeks Before	Task	Platform
4–6	Event Advertising	Website (may vary if organized jointly with another event, example LatinR Website) / Social (include Slack workspaces)
1-2	Send instructions to mentors/editors	Email
0-1	(If participants register) Send instructions to participants	Email
0	Run translathon(s)	Zoom / Docs /
		Project Board
After	Evaluate participant feedback	Survey form
event		(Airtable)

### 6.4 Planning

### 6.4.1 Set the date of the event

When you organize the translathon as part of another event, the date will depend on the availability of both events and the mentors and editors.

For future general events, we recommend choosing the date first and then inviting mentors and editors. For niche events (e.g., by language or subject area), it may be more effective to coordinate with editors and mentors first and then set the date, similar to the dynamics of Community Calls. If you plan to organize multiple events, it is essential to take time zones into account to facilitate global and diverse participation.

In our pilot case, the translathon was held as a satellite event of the LatinR conference. The conference offered us two potential days and we offered those days with time slots to mentors and editors to set the final date.

### 6.4.2 Registration

Registration is required for **mentors/editors** so we can confirm sufficient support and send them preparation instructions. For **participants**, registration can be optional, especially if the event is not part of a larger event.

In our pilot we registered attendees free of charge using the same conference registration system (Eventbrite). This system was also used to send pre-event notifications and to share access information for the online meeting which helps with the logistics of the event.

### 6.4.3 GitHub Project

rOpenSci translations are carried out using GitHub projects. Each translation Pull Request is listed in differents cards according to their status:

- Todo Automatic Translation
- Todo First Review
- Todo Second Review
- To be merged
- Merged

Ensure the different projects are up-to-date for the mini translathons. Usually the PR listed under Todo - First Review and Todo - Second Review are the best ones to work on during translathons.

rOpenSci staff create pull requests with the first automatic translation for the texts needing translation and label them with the corresponding translation tag and event-specific tag (e.g., ro-translathon-2024).

translation :mate: is the label used for Spanish translations Tradução is the label used for Portuguese translations.

Translation tasks should be:

- relatively small (a blog post, a section of documentation, a tutorial, a chapter),
- clearly scoped,
- and already prepared in a pull request to reduce setup time.

Tasks can be categorized by:

- Documentation (manuals, guides, books)
- Website (pages, posts)
- Interfaces (package messages, Web UI strings)
- Tutorials (examples, lessons)

Editors review translations during or after the event, ensuring contributions maintain quality.

### 6.5 Event

Here we cover the specifics of actually running the event. What needs to be done just before, during, and after the event.

### 6.5.1 To Do List

### • Before

- Create Coworking Document in the language of the event (prepopulate any registrants)
- Prepare Feedback forms and add to Coworking Doc
- Finalize GitHub Project Board
- Add links to the Slack event channel
- Advertise with posts in rOpenSci Slack and other community Slack channels
- Advertise event in HQ section of the rOpenSci Newsletter
- Send reminder one week before and one hour before (email and social media)

### • During

- Share link to Coworking Document
- Share link to GitHub Project Board
- Share link to the Translation and Localization Guidelines
- Match participants with tasks and mentors/editors
- Prepare Breakout rooms
- Keep track of contributions (get GitHub handles for all participants) and make sure people get acknowledged
- Share contributions and sucess on social media and Slack channel (with permission of the attendes)
- Remind people to fill out the feedback form throughout the event
- Send Slack invitations to the attendees and add them to the Slack event channel.

### • After

- Follow up as needed in Slack, keep updating PR merges etc.
- Editors finalize reviews and merges
- Send out email to Mentors/Editors to thank them and give them details on how to receive honourarium

### 6.5.2 Running the event

This is a schedule template:

• Welcome (5 minutes): share docs and intro of host, mentor and editors.

- Event instructions + translation instructions (15 min): Orientation, code of conduct, overview of translation process.
- Task assignment (10 minutes): Participants select a translation tasks on the GitHub Project and comment on the PR.
- Coworking (30 min): Participants work on translation tasks, supported by mentors.
- Break/Check-in (5–10 min): Short pause to stretch, share progress, and regroup.
- Coworking (45 min): Continued translation and review work in breakout or main rooms.
- Wrap-up (15 min): Organizers summarize progress, highlight next steps, and encourage ongoing contributions in Slack.

### 6.6 Resources

- Guidelines
  - rOpenSci Translation Guide
- Templates
  - Appendix Email templates
  - Appendix Form templates
- Example advertising
  - [Social media post before the translathon] Mastodon and LinkedIn
  - Social media post during the event
  - Newsletter Higlight after the event
  - Event rOpenSci Website & LatinR WebSite
- Supporting Tools for Running the Event
  - Coworking Document
  - GitHub Translation Project Board

### 7 Mini-hackathons

### 7.1 Overview

Mini-hackathons are 2-hr events designed as a variation on the standard rOpenSci coworking format. They are a combination of a hackathon (a dedicated period of time where participants make contributions to selected FOSS projects) and an rOpenSci coworking event (an online video meeting where participants come together to work on different things and socialize).

rOpenSci Coworking Sessions are generally 2-hr sessions with a primary host and a guest community host with a different theme each month. During a session, the primary host orientates participants and leads introductions. Then participants can choose work on their own projects, to socialize or discuss the monthly theme in a 'noisy' breakout room with the community host, or a combination of the two. The primary host arranges a break and miniscavenger hunt in the middle and wraps up the meeting at the end.

Mini-hackathons differ from coworking (and from many hackathons) in that it is presumed that most if not all participants are attending to contribute to FOSS (possibly for the first time), there are many breakout rooms, and there are at least 5-10 mentors or maintainers to support the participants.

In a mini-hackathon, rOpenSci staff, package maintainers, and mentors are on hand to support participants with their first contributions. Maintainers and mentors sign up to participate beforehand and prepare relevant issues for new contributors. During the coworking session, mentors and maintainers split into different Zoom breakout rooms to chat with participants one-on-one or in small groups to support them with their contributions. All maintainers, mentors, and participants are also added to a special mini-hackathon channel in the rOpenSci Slack where they can further discuss contributions after the event ends.

During and after the event, participants are invited to complete an optional feedback survey collecting insights on their experiences, challenges faced, and suggestions for improvement.

### 7.2 Maintainers and Mentors

The goal of mini-hackathons is less that open source projects receive attention, and more that participants have a good experience from which they learn how to make contributions, and gain the confidence/motivation to continue making contributions. Therefore, the core idea of

the mini-hackathon is that it is a **live** and **synchronous** event, and that there will be active and immediate support for participants.

As such it is important to ensure that sufficient maintainers and mentors are present. **Maintainers** are those who maintain an R package to which they will be supporting contributions. **Mentors** are those who are not expliciting supporting contributions to their own R package, but who will be generally helping participants learn how to make contributions to other packages.

Originally we solicited participation from maintainers of rOpenSci packages in particular, later however, we opened up registration to maintainers of any R package and mentors in general in order to increase the number of maintainers and mentors participating.

Because this work doesn't necessarily directly benefit the maintainer or mentor, and for maintainers it may require extra work to prepare an R package for contributions of this nature, we suggest offering maintainers and mentors an honorarium to help equalize participation by offsetting the cost of their time. If you do, prepare clear instructions on how mentors can receive their honorarium after the event. Depending on how your organization works, you may wish to include links to optional invoice templates.

In our 2024/2025 pilot we applied for and received funding from NumFocus through an Small Development Grant which allowed us to offer maintainers and mentors a \$200 USD honorarium for participating in the mini-hackathons.

### 7.3 Timeline

See Events Overview for the full timeline of paired events.

The following timeline is setup for a single event, but repeat events are easy to insert.

Table 7.1: Approximate timeline of tasks

Weeks Before	Task	Platform
10	Choose date/time for mini-hackathon	
6-8	Open call for maintainers/mentors at hands-on events	Blog / Registration / Social
4-6	Open call for participants at hands-on event(s)	Blog / Registration / Social
4-6	Event advertising <sup>1</sup>	Website

<sup>&</sup>lt;sup>1</sup>Advertising the Open Call for participants has a lot of overlap with advertising the dates of the event itself.

Weeks Before	Task	Platform
1-2	Send instructions to maintainers	Email (Labelling &
		Process)
0-1	(If participants register) Send instructions to participants	Email (Process)
0	Run mini-hackathon(s)	Zoom / Docs /
		Issues / Project
		Board
After	Evaluate participant feedback	Survey form
event	-	(Airtable)

### 7.4 Planning

### 7.4.1 Set the date of the event

Pick dates for the events prior to advertising open calls for maintainers and mentors and participants. Make sure you give yourself enough time to recruit maintainers and mentors (~6-8 weeks) and to change the date if you feel that you may not have enough maintainers and mentors. Then once you have a good set of maintainers and mentors registered, start advertizing for general participants (~4-6 weeks).

However, if conducting domain-specific events, then it could be worth contacting maintainers and mentors first and *then* picking dates with their schedules in mind (similar to how rOpenSci organizes Community Calls).

In our pilot we had opened the call for mentors before setting a date. We then used a poll to decide on appropriate dates for the mini-hackathon. This made it difficult for mentors to commit to the event, as we were asking for expressions of interest before we had a date.

Regardless of how dates are set, if arranging several events, choose times which give a reasonable level of international coverage.

In our pilot, we had two events, and so chose European and Australian time zones to cover as much range as possible.

### 7.4.2 Registration

Registration is required for maintainers and mentors as we need to ensure there we have enough to help, and we need a way of contacting them to send out further instructions.

Registration is optional for participants to encourage last minute attendance, while still giving us an idea of the level of interest in the event. This helps us ensure we have enough maintainers and mentors and makes it easier to send Slack invitations as we already have the emails of some participants. We also pre-populate the coworking documents with the names of maintainers and mentors as well as registered participants.

In our first mini-hackathon pilot we made registration mandatory for participants, but in the end we didn't find it necessary, so for the second event we made registration optional.

We find that optional registration simplifies organizing the event as we dodn't necessarily have to send out meeting links or deal with last minute registrants.

However, by having mandatory registration you would have an even better idea of the number of participants to expect, so the trade offs may be worth it for your organization, or depending on the nature of your hackathon.

We used AirTable forms to collect registrations for maintainers and mentors as well as participants. However, any registration form system could work for this step (e.g., Google Forms, Zoom, etc.)

### 7.4.3 Issues and Labelling

About two weeks before the event we contact maintainers to remind them about the event and ask them to prepare and label issues in their repositories using a label specific to the event.

There are also other labels that are very useful, like 'help wanted' and 'good first issue'. You can also encourage maintainers to consider different type of label according to the type of project.

In the 2025 mini-hackathons, we used ro-hackathon-2025 as the label and Slack channel name.

We also suggest that maintainers create certain types of issues for these events. We find that small, bite-sized, coding-related tasks are issues most likely to be tackled by participants.

### Examples include

- adding simple tests to improve code coverage
- adding checks to input arguments to existing functions
- fixing problems with best-practices
- updating use of deprecated functions
- adding badges to READMEs

In our pilot hackathons, participants also pointed out that when thinking about task complexity, maintainers should consider the number of files which need to be modified as well as whether or not any files need to be compiled or the package needs to be re-built.

While documentation is something that can be completed by first-time contributors, it doesn't seem to be as attractive. Possibly because updating usage or creating tutorials requires more time to understand the package, or because it doesn't give participants a chance to develop the skills they really want to develop.

### 7.4.4 GitHub Project Board

By havinging maintainers use a specific label for issues, we can use a GitHub search to identify these issues.

We then also find it useful to manually organize these issues into a GitHub Project. This allows us to categorize the issues by type (Documentation, Feature, Best Practices, Testing, etc.) to help participants more quickly find an issue they would like to address. The links to the Project and the Search are added to the Coworking document as well as the Slack channel for easy access.

### 7.4.5 Outreach and Communication

We advertise the calls for maintainers and mentors and participants with

- blog posts (e.g., mentors, participants)
- social media (e.g., LinkedIn and Mastodon; see example text),
- Slack channels (rOpenSci as well as on partnering Slack workspaces)
- rOpenSci Newsletter (e.g., mentors, participants).

In addition the these announcements, it's important to send reminders 1 week, 1 day, and 1 hour in advance on social media (examples).

### 7.5 Event

Here we cover the specifics of actually running the event, specifically what needs to be done just before, during, and after.

Note that during coworking, we use a slide deck and Coworking Document for introductions, sharing links, and sharing notes.

### **7.5.1** To Do List

#### **Before**

- Social posts advertising the event 1 week, 1 day, and 1 hour in advance on social media (examples)
- Advertise with posts in rOpenSci Slack and other community Slack channels
- Advertise event in HQ section of the rOpenSci Newsletter
- Create Coworking Document (prepopulate registrants)
- Create Slides
- Prepare Feedback forms and add to Coworking Doc and Slides
- Finalize GitHub Project Board
- Add links to the Slack Channel
- [optional] Email links to join the event and participation instructions one week, one day and one hour before [Include link to GitHub Project Board if possible]

### **During**

- Prepare Breakout rooms
- Share link to Coworking Document
- Point out the CoC and relevants links in the document
- Ask people to add their contact information to the document
  - name
  - email address (if they want to join the Slack)
  - GitHub handle (to track contributions)
- Send Slack invitations to attendees and add them to the event channel
- Share link to GitHub Project Board
- Keep track of contributions and make sure people get acknowledged
- Share contributions on social media (use the event hastag) and in the event Slack channel
- Remind people to fill out the feedback form throughout the event

### **After**

- Follow up as needed on Slack, keep updating PR merges etc.
- Send out email to maintainers and mentors to thank them and give them details on how to receive honourarium

### 7.5.2 Running the event

#### Schedule

- Introduction (10-15 min)
- Co-working (45 min)
- Break/Checkin/Mini scavenger hunt (5-10 min)
- Co-working (45 min)
- Wrap up (5 min)

During the introductions each maintainer and mentor introduces themself and comments on how they can help or what kind of contributions they expect for their package. In this way the attendees can begin to decide what they would like to work on and with whom.

During coworking, we open breakout rooms to cover different topics. We include a Quiet room where people can work without chatter, as well as several generic rooms ("Room 1", etc.) where package maintainers can chat one-on-one or with small groups of participants about their package.

At the start of coworking an organizer asks mentors (those without a package), to go to a topic room and stay for 5 min in case a participant would like help with that topic. Afterwards they are free to 'roam' and see where they might assist participants or maintainers.

Next an organizer will ask participants if they have a particular package or issue they'd like to work on, and will help match participants up with maintainers if they are unsure. The organizer will assign maintainers to specific rooms to chat with participants as participants express interest.

After this initial sorting, at least one organizer remains in the 'main' room to help direct participants.

#### Breakout room topics

- General (main room) 'If you're not sure, come here'
- Collaboration Workflows and Etiquette
- Collaborating on GitHub (Pull Requests)
- Build tools for R packages
- Translations
- Quiet Room
- Room 1
- Room 2
- ...

In our pilot mini-hackathons, we had one 'Git and GitHub' room rather than the two 'Collaborating' rooms, but it was rarely used.

### 7.6 Resources

- Templates
  - Appendix Email templates
  - Appendix Form templates
- Example advertising
  - Examples Social Media
  - [Blog] Looking for Maintainers to Support First-Time Contributors (Oct 22 2024)
  - [Blog] Coworking Mini-Hackathon for First-Time Contributors (Jan 24 2025)
  - [Blog] Attract Contributors with 'help wanted' Issues (Sep 19 2013)
  - Event Coworking Mini-Hackathon for First-Time Contributors! (Feb 4 2025 & Mar 4 2025)
  - rOpenSci Newsletter Maintainers and Mentors
  - r<br/>OpenSci Newsletter Participants
- Supporting Tools for Running the Event
  - Coworking Document (Mar 4 2025)
  - Slides
  - GitHub Issues Search
  - GitHub Issues Project Board

## A Example Resources

### A.1 Pilot project 2024-2025

- Community calls
  - A comunidade R fala português (Nov 6 2025)
  - From Novice to Contributor: Making and Supporting First-Time Contributions to FOSS (Jan 20 2025)
- Blog posts
  - Looking for Maintainers to Support First-Time Contributors (Oct 22 2024)
  - Coworking Mini-Hackathon for First-Time Contributors (Jan 24 2025)
  - Labels For Technical Writing Projects (Sep 12 2024)
  - Attract Contributors with 'help wanted' Issues (Sep 19 2023)
- Event listings
  - Translation + Hackathon = Traslaton rOpenSci at LatinR
  - Coworking Mini-Hackathon for First-Time Contributors! (Feb 4 2025 & Mar 4 2025)
- Coworking mini-translathons
  - XXXX
- Coworking mini-hackathons
  - Coworking Document (Mar 4 2025)
  - Slides
  - GitHub Issues Search
  - GitHub Issues Project Board

## **B** Email templates

### **B.1** Mini-hackathon

### B.1.1 Mentors - 2 weeks before

Subject: rOpenSci Mini-Hackathon - Preparation

Hi Everyone!

We're looking forward to our second Mini-hackathon coworking session in two weeks, March 4th, 13:00–15:00 UTC (find your local time [UPDATE DATE/TIME]). Some of you have signed up as Package Maintainers, and some as Mentors to help guide participants during the hackathon. We'll send out details of how things will go next week, but in the meantime we wanted to give Package Maintainers some suggestions for preparing.

Before the hackathon we ask that Maintainers take a bit of time to create and/or label issues in your packages. We find that small 'bite-size' tasks work well, and small coding-related tasks especially so.

Consider issues for things like adding simple tests (e.g., testing that functions fail correctly), or adding argument checks to an existing function (e.g., ensure that the function fails informatively given incorrect inputs). You can run test coverage on your package to identify lines that need coverage which might be straightforward to address. Another thing that you can consider is addressing problems identified by 'goodpractice' (we'd suggest running this beforehand and creating specific issues for the items identified). Updating the README or clarifying the CONTRIBUTING guide are also useful, yet manageable tasks.

Make sure you use the label "ro-hackathon-YYYY" so we can find it and add the issue to our master list. Also consider labels such as "help wanted" and "good first issue". There may be participants who have more advanced skills so feel free to label some non-beginner issues as well.

We've created a channel called "ro-hackathon-YYYY" in the rOpenSci Slack and have added those of you who are already in this Slack. If you are not in our workspace, you will get an invitation from Yani nearer to the event.

Feel free to advertise this event [UPDATE LINK] in your circles or social media!

Let us know if you have any questions or would like any help or feedback on anything,

Yani Bellini Saibene Community Manager, rOpenSci Steffi LaZerte Community Manager Assistant

### B.1.2 Mentors - 1 week before

Subject: rOpenSci Mini-Hackathon - Information

Hi Everyone!

We're looking forward to our second Mini-hackathon coworking session next week, MONTH DAYth, HH:MM—HH:MM UTC (find your local time [UPDATE DATE/TIME]). This will be on Zoom (details on the event page [UPDATE LINK] and below) and Yani and Steffi will be available to help out.

### Before the hackathon

As a reminder, we ask that Maintainers take a bit of time before the event to create and/or label issues in your packages. Remember to use the "ro-hackathon-2025" label and let us know if you have any questions or need any help with this.

### During the hackathon

We will do a brief introduction and ask Maintainers and Mentors to introduce themselves.. Once we get started we will ask Mentors to hang out in specific topic breakout rooms (e.g., "git/GitHub") for at least the first 5 min to see if any participants would like to chat. After that they are free to roam about the rooms, helping as they like. Maintainers can claim a breakout room to chat with participants wanting to work on their package or can move about among the rooms. Participants may need some time to get oriented with what tasks are available and how to start working on them. Remember that some participants may be raw beginners, so help them find an appropriate issue to tackle and be encouraging and patient. This will be a coworking session, so people can dive in with getting started but still have others around to help or answer questions.

### After the hackathon

Everyone who participated in the hackathon will be added to a special Slack channel so conversations can continue asynchronously. We suspect that some participants may not finish all they hope to do during the coworking session itself, so we hope that both Maintainers and Mentors will have some availability to answer questions that may come up on the Slack channel in the week following the event (Yani and Steffi will be available too). Yani will also contact you regarding your stipend to help offset the costs of your time for this amazing work!

We're looking forward to seeing you next week, let us know if you have any questions!

Yani Bellini Saibene Community Manager, rOpenSci

Steffi LaZerte Community Manager Assistant

#### Zoom info:

Link:

Meeting ID:

Passcode:

### B.1.3 Participants - 2-3 days before

Subject: rOpenSci Mini-Hackathon - Information

Hi Everyone!

We're looking forward to our second Mini-hackathon coworking session next week, March 4th, 13:00–15:00 UTC (find your local time [UPDATE DATE/TIME]; Zoom details on the event page [UPDATE LINK] and below). We just wanted to check in and give you an overview of how things will go.

### Before the hackathon

Most of our packages are on GitHub, so you need to have a GitHub user account.

### During the hackathon

We will have a list of issues prepared by package maintainers and other experienced mentors available to help guide you. You may want to ask Maintainers to explain details of an issue or package, or you may want to ask any of the Mentors about the basics of git and GitHub (see also Developing Software Together and Happy Git and GitHub for the useR if you'd like to get a head start). This will be a coworking session, so you can dive in with getting started on making a contribution, but still have others around to help or answer questions.

#### After the hackathon

Everyone who participated in the hackathon will be added to a special Slack channel so conversations can continue asynchronously. We suspect that some participants may not finish all they hope to do during the coworking session itself, so this channel will be a place where you can ask follow up questions in the week following the event.

We're looking forward to seeing you next week, let us know if you have any questions!

Yani Bellini Saibene Community Manager, rOpenSci Steffi LaZerte

Community Manager Assistant

Zoom info:

Link:

Meeting ID:

Passcode:

If possible, consider also including a link to the Project Board so that participants have the chance to consider in advance any issues they might like to tackle during coworking.

### B.1.4 Participants - 1 hour before

Subject: Reminder: rOpenSci co-working and mini-hackathon start in 1 hour

Hi everyone! This email is a friendly reminder that our Co-Working Sessions on First-Time Contributions will start in one hour.

Zoom information:

See you all there!

Yanina Bellini Saibene rOpenSci Community Manager

Steffi LaZerte

Community Manager Assistant

## **C** Form templates

### C.1 Mini-hackathon

### C.1.1 Registration for mentors

### Call for rOpenSci Maintainers to Support First-Time Contributors

Welcome! We are looking for maintainers of rOpenSci packages or R packages maintainers to participate in coworking events designed to support people making first-time contributions. If you are interested in participating please fill out this form. Please contact [CONTACT 1] or [CONTACT 2] if you have any questions, or check out the blog post announcement [ADD BLOG POST LINK].

Then, if participating, we ask that maintainers:

- Work with rOpenSci staff to pick dates/times for the coworking events which best work for everyone.
- Create and/or identify issues in your rOpenSci repository as 'Help wanted' and 'Good first issue'.
- These can range from documentation to coding changes. We just ask that some issues are relatively accessible to contributors with less experience.
- Attend one of the Coworking sessions to be available to offer advice or answer questions.
- Have some availability before and after the Coworking event to respond via GitHub and Slack to issues, comments, or PRs which may arise from contributors outside of the two-hour coworking slot.

If you participate, you can also expect that:

- We will connect with you before the events to find a date/time for the coworking sessions and see if you have any questions regarding issue-labelling or the coworking sessions.
- We will be available to support you during the Coworking sessions on Zoom, as well as on GitHub, Slack, or by email before and after.
- You will receive a \$[XXX] USD stipend to help offset the time you spend teaching and mentoring these new contributors.

With the support of [FUNDER].

#### Form fields

- Full Name\*
- Email\*
- Timezone\* Which timezone will you be in during the events? This information helps us to organize the events
- Which rOpenSci package(s) would you like to invite contribution for?
- If you have more the one package, please list them below
- Why would you like to participate? 2-3 sentences

Originally we asked for maintainers of rOpenSci packages in particular, later however, we opened up registration to maintainers of any R package.

### C.1.2 Registration for participants

Join rOpenSci Minihackathons!

These collaborative events [ADD BLOG POST LINK] are designed to help first-time contributors get started with open-source projects. Whether you're improving documentation, reviewing translations, fixing bugs, or adding new features, our mentors will guide you every step of the way.

No prior experience required. Non-first time contributors are very welcome too—just bring your curiosity and enthusiasm!

Events are open and free.

With the support of [FUNDER].

Please, fill out this form to register for the events. We require this information to organize the meetings with mentors, breakout rooms and resources.

### Form fields

[\* fields are required]

- Full Name\*
- Email\* This email address will be used to send event information (zoom link and other resources) and the Slack channel invitation to interact before, during and after the event.
- Pronouns Please indicate your pronouns (example: she, they, he)
- Country\*
- Meetings\*
- Choose the meeting(s) you plan to attend [Drop down menu]

### Message after they register:

Thank you for registering for rOpenSci coworking and minihackathons for contributions to FOSS. You will get an email with the event information soon. Feel free to contact us at info@ropensci.org if you have any questions about these events.

### C.1.3 Feedback Form

This is an anonymous form for you to tell us what you thought of the event. This information is very useful for us to improve the organization and the overall experience for our participants.

#### Form fields

[All are free-form answers with the exception of "How likely are you to recommend this event..."] [No fields are required]

- One thing you liked Please share one thing that you liked or which we should keep. One positive aspect of the meeting.
- One thing to improve Please share one thing we could improve. One constructive criticism.
- How likely are you to recommend this even to a friend or colleague? [0-10 Stars]
- How did you hear about the event? Please mention all methods (Newsletter, Slack, Mastodon, BlueSky, Blog Post, LinkedIn, word of mouth, etc.

### C.2 Mini translathon

### C.2.1 Attendees Registration - Portuguese

Tradução + Hackathon = Translathon rOpenSci

O objetivo é que a comunidade R conheça o rOpenSci e se reúna para aprender a contribuir com o projeto de tradução para o português.

Date and time Monday, November 18, 2024 · 10am - 12pm GMT-3

Location Online

### Good to know

O Traslaton rOpenSci é realizado em conjunto com o LatinR

O objetivo é que a comunidade do R conheça o rOpenSci e se reúna para aprender como contribuir com o projeto de tradução ativa do rOpenSci para o português e fazer contribuições durante o Traslatón. Várias pessoas da comunidade estarão presentes durante as duas horas do evento online para ajudá-lo durante sua contribuição.

### Agenda:

- Começaremos com uma explicação de como funciona o processo de tradução, como fazer uma segunda revisão e onde sua ajuda é necessária para progredir na tradução.
- Em seguida, trabalharemos em blocos de 30 minutos e nos reuniremos para ver o progresso que fizemos.

- Explicaremos o processo da primeira revisão, indicaremos onde essa tarefa é necessária e depois voltaremos ao trabalho por 30 minutos.
- Por fim, nos reuniremos novamente para analisar o progresso e organizar como continuaremos a trabalhar.

Trabalharemos com o Guia de desenvolvimento de pacotes do r OpenSci. Todos que contribuírem para a tradução serão adicionados como autores dessa tradução quando a primeira versão do trabalho final for publicada. Os colaboradores serão convidados a participar do r OpenSci Slack.

### Form fields

[Name] [email] [country]

## D Social Media templates

Social media posts on Slack, LinkedIn, and Mastodon

### D.1 Slack - Maintainers announcement

Hi @channel

Making your first contribution to Open Source can be both empowering and intimidating. Therefore we're exited to announce a special series of activities to support first-time contributors to rOpenSci packages! :tada:

In 2025[UPDATE], we're planning a Community Call and several Coworking sessions/mini hackathons to support first-time contributors.

As part of these sessions, we're looking for rOpenSci package maintainers interested in helping people make their first(ish) contribution to Open Source. We know that maintaining a package requires a lot of time and effort, and teaching and mentoring someone through their first contribution can also take time. So we're also excited to announce that we have funding to offer participating maintainers a stipend to help offset their time.

See our blog post[UPDATE LINK] for more details and how to sign up!

### D.2 Slack - Participants

Coworking Mini-Hackathon for First-Time Contributors next week!

:hourglass\_flowing\_sand: When: Tuesday February 4th 09:00 Australian Western (01:00 UTC)

:grey\_exclamation:Join other participants and mentors to make contributions to R package in a fun and supportive environment.

Don't forget to register to participate! https://ropensci.org/events/coworking-2025-02

### D.3 Mastodon/LinkedIn - Maintainers announcement

Looking for Maintainers to Support First-Time Contributors

Making your first contribution to Open Source can be both empowering and intimidating. So we're exited to announce a special series of activities to support first-time contributors to rOpenSci packages!

Are you an rOpenSci package maintainer who would like to help someone make their first contribution?

See our blog post for more details and how to sign up (by Nov 24): ropensci.org/blog/2024/10/22/first-time-contributions

## E Mastodon/LinkedIn - Maintainers reminder

### Reminder!

Making your first contribution to Open Source can be both empowering and intimidating.

Therefore we're exited to announce a special series of activities to support first-time contributors to rOpenSci packages!

We're hoping to get enough maintainers registered by this Sunday (Nov 24th) so we can start the ball rolling finding times that work for everyone in 2025.

If you've been thinking about it, here's a mini push to register

ropensci.org/blog/2024/10/22/first-time-contributions

Also regarding Supporting First Time Contributions...

If you're interested in participating but don't have an rOpenSci package, or are interested in having people make contributions to your package but don't have time to join the coworking sessions, we also encourage you to register and let us know in the comments. We'll see if we can't come up with some pairings that work for all. Thanks everyone!

ropensci.org/blog/2024/10/22/first-time-contributions

We still have some room, so are excited to announce that we can now accept non-rOpenSci package maintainers until December 9th .

Come help empower and support first-time contributors to R packages through a series of mini-hack-a-thons in 2025.

Details and to sign up: ropensci.org/blog/2024/10/22/first-time-contributions

## E.1 Mastodon/LinkedIn - Participant

Coworking Mini-Hackathon for First-Time Contributors

Curious or excited about contributing to Open Source Software? Would you like some support to get started? If any of the above, our upcoming coworking mini-hackathons are for you!

Feb 4th 2025 1-3 UTC and March 4th 2025 13-15 UTC

Join us and contribute to R packages while package maintainers and other mentors are available 'live' to answer questions and give guidance.

See our blog post for more details: ropensci.org/blog/2025/01/24/coworking-hackathons

## F Social Media examples

These are examples of social media posts for advertising the events.

### F.1 Mini-hackathon

### F.1.1 Registration for mentors

Original posted on Mastodon

Looking for Maintainers to Support First-Time Contributors

Making your first contribution to Open Source can be both empowering and intimidating. So we're exited to announce a special series of activities to support first-time contributors to rOpenSci packages!

Are you an rOpenSci package maintainer who would like to help someone make their first contribution?

See our blog post for more details and how to sign up (by Nov 24): https://ropensci.org/blog/2024/10/22/first-time-contributions/

#RStats @rstats@a.gup.pe

Original posted on Mastodon

Reminder!

Making your first contribution to Open Source can be both empowering and intimidating.

Therefore we're exited to announce a special series of activities to support first-time contributors to rOpenSci packages!

We're hoping to get enough maintainers registered by this Sunday (Nov 24th) so we can start the ball rolling finding times that work for everyone in 2025.

If you've been thinking about it, here's a mini push to register https://ropensci.org/blog/2024/10/22/first-time-contributions/#RStats@arstats@a.gup.pe

### F.1.2 Registration for participants

Original posted on Mastodon

Coworking Mini-Hackathon for First-Time Contributors

Curious or excited about contributing to Open Source Software? Would you like some support to get started? If any of the above, our upcoming coworking minihackathons are for you!

Feb 4th 2025 1-3 UTC and March 4th 2025 13-15 UTC

Join us and contribute to R packages while package maintainers and other mentors are available 'live' to answer questions and give guidance.

See our blog post for more details: https://ropensci.org/blog/2025/01/24/coworking-hackathons/

```
#RStats
@rstats@a.gup.pe
```

### F.1.3 Reminders

Original posted on Mastodon

Coworking Mini-Hackathon for First-Time Contributors next week!

Tuesday March 4th 14:00 European Central (13:00 UTC)

Join other participants and mentors to make contributions to R packages in a fun and supportive environment.

Registration is appreciated but not required.

https://ropensci.org/events/coworking-2025-03

```
#RStats
@rstats@a.gup.pe
```

### Original posted on Mastodon

Coworking Mini-Hackathon for First-Time Contributors coming up in an hour!

Join other participants and mentors to make contributions to R packages in a fun and supportive environment.

Registration is appreciated but not required.

https://ropensci.org/events/coworking-2025-03

# RS tats

@rstats@a.gup.pe