

Governance for the Specification of the Parallel Runtime Interface for Fortran (PRIF)

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1 Introduction and Background

The Parallel Runtime Interface for Fortran (PRIF) is a specification that defines a compiler-agnostic and runtime-library-agnostic interface to support the multi-image parallel features of Fortran. PRIF is an interface that is agnostic to both the compiler and the runtime library, and this allows for a greater flexibility and compatibility between any compilers and any runtime libraries that support the interface. This design requires the interface to be consistently followed across compilers and runtime libraries that strive to be PRIF-compliant. It also means that updates to the PRIF specification need to be carefully considered and communicated clearly amongst the PRIF stakeholder community. The stakeholders in PRIF are compiler developers, who maintain code that invokes PRIF procedures within a Fortran compiler, and the runtime library developers, who implement the interface and provide a library that will handle the communication involved. Those writing Fortran programs invoking multi-image Fortran features may be users of the resulting compiler/interface/runtime software stack that includes PRIF and therefore benefit from PRIF and updates to the specification, but they are not direct stakeholders as the term regards determining eligibility for committee membership.

This document outlines the governance process that controls the maintenance of the PRIF specification, which includes the definitions of PRIF types, named constants, and procedures.

PRIF was originally designed at Lawrence Berkeley National Laboratory:

- Dan Bonachea, Katherine Rasmussen, Brad Richardson, Damian Rouson,
"Parallel Runtime Interface for Fortran (PRIF) Specification, Revision 0.5",
Lawrence Berkeley National Laboratory Technical Report (LBNL-2001636), Dec 2024.
<https://doi.org/10.25344/S4CG6G>

2 PRIF Committee Members

The ongoing maintenance of the PRIF specification is done by the PRIF Committee. This section describes the Committee, the members and their roles.

The PRIF Committee consists of a Community Lead, Technical Lead and Committee members. The Committee members may also be a liaison for a particular Fortran compiler or runtime library PRIF implementation. For those who are interested in joining the PRIF Committee, please read this section and determine whether you are able to meet the requirements and fulfill the role of a Committee member. For those who would like to suggest changes to PRIF, please see directions for how to do so in the PRIF Maintenance and Updates section below.

Role of Community Lead: The role of the PRIF Community Lead is to convene and preside over meetings of the PRIF Committee, maintain the PRIF Committee membership roster, ensure this governance process

is followed at all times, and enforce the community [Code of Conduct policy](#) in all community events and forums.

Role of Deputy Community Lead: The role of the PRIF Deputy Community Lead is to serve as a backup for when the Community Lead is unavailable or unable to preside. In such cases, the Deputy Community Lead may convene and preside over Committee meetings, wherein they act as the Community Lead.

Role of Technical Lead: The role of the PRIF Technical Lead is to help guide the maintenance of PRIF such that any updates to the specification are technically sound and fairly serve the needs of all stakeholders. This requires a deep understanding of the specification, its design, and the use cases.

Role of Deputy Technical Lead: If the Technical Lead is unable or unwilling to perform the duties assigned by this document for a period exceeding two (2) calendar weeks (excluding periods of US DOE laboratory shutdowns), the Community Lead shall direct (via announcement to the public mailing list) the Deputy Technical Lead to temporarily assume all duties of the Technical Lead, for a period not to exceed eight (8) calendar weeks.

Role of Committee Members: Committee members are those who meet regularly to discuss PRIF and who contribute to the consensus decisions when any updates to PRIF are made. Committee members have access to the private Github repository where the source for the PRIF specification is housed. They are able to open Pull Requests to propose edits to the PRIF specification. The Committee Leads also serve as Committee members.

2.1 Requirements to become and stay a Committee member

1. Attend the regularly scheduled PRIF meetings (currently monthly)
 - Attend no less than 60% of the PRIF meetings scheduled for the past 6 months
2. Follow the [Code of Conduct policy](#)
3. Be demonstrably associated with a PRIF stakeholder (as defined above), as a significant technical contributor.

2.2 Current Committee Roster

Date of last update to this roster: 2025-06-12

Community Lead

- [Katherine Rasmussen](#) krasmussen@lbl.gov - LBNL / Caffeine

Deputy Community Lead

- [Brad Richardson](#) - NASA / Caffeine

Technical Lead

- [Dan Bonachea](#) - LBNL / Caffeine

Deputy Technical Lead

- [Jean-Didier Pallieux](#) - SiPearl / LLVM Flang

Committee Members

- [Etienne Renault](#) - SiPearl / LLVM Flang
- [Damian Rouson](#) - LBNL / Caffeine

3 PRIF Committee Meetings

PRIF meetings shall take place on a regular basis. Currently, the meetings occur monthly. The Community Lead is expected to schedule Committee meetings in a manner that is (1) responsive to reasonable requests from Committee members and (2) respects the time constraints of Committee members as fairly as practical.

Meetings of the PRIF Committee are held virtually, open to all interested parties, and shall be announced at least 1 week in advance on the public PRIF specification mailing list. For those who are not PRIF Committee members, please contact the PRIF mailing list (see below) to be invited to the next regularly scheduled PRIF meeting. In order for a meeting to constitute a decision-making quorum, at least 50% of the current PRIF Committee membership must be present either directly or by proxy.

PRIF meeting time shall be used to discuss:

1. state of the PRIF community
2. design updates to the specification
3. compiler-related PRIF efforts
4. runtime-library related PRIF efforts

4 PRIF Maintenance and Updates

Although ratified revisions of the PRIF specification are public documents, the source for the PRIF specification is hosted in a private GitHub repository, to which only the PRIF Committee members shall have access. This repository is hosted by the originating organization, Lawrence Berkeley National Laboratory. PRIF Committee members agree to follow the license governing the PRIF source repository, which prohibits sharing the source for the PRIF specification outside of the PRIF Committee.

To suggest a change to the PRIF specification, the advocate must present a description of the need for the change and a description of the design for the change during a meeting of the PRIF Committee. A proposed design must receive approval from at least 50% of the Committee members (excluding abstentions) in attendance of a meeting that reaches the decision-making quorum. Once a design has been approved, the advocate is permitted to begin suggesting corresponding edits to the PRIF specification.

Once the edits are ready, a Committee member may open a Pull Request (PR) against the main branch of the PRIF GitHub repository. Non-Committee members advocating for a change to PRIF will need to either join the Committee or secure an existing Committee member who is willing to act on their behalf in entering proposed edits to the PRIF specification.

When a PR is opened by a Committee member, other members are expected to participate in reviewing the PR. PRs shall be reviewed with the following in mind:

- Is it required to provide a desired functionality or fix?
- Is it free of typographical or formatting errors?
- Does it include appropriate updates to the list of changes for the current revision?
- Is the new wording in the specification clear and comprehensible?
- Does it follow existing document conventions for formatting and terminology?
- Does it maintain or establish internal consistency with other parts of the specification?
- Does it avoid introducing semantic ambiguity, either directly in the changes or indirectly by conflicting with the existing specification?
- Does it avoid creating unwanted repetition that should be factored?

Before advancing to candidacy for acceptance, a specification PR containing normative changes must receive either: (1) approval from the Technical Lead (who may also be the author) and approval from at least one other Committee member (other than the original author), or (2) an approval from at least four Committee members (other than the original author). Upon reaching candidacy for acceptance, a vote of the full PRIF Committee takes place (see next section), which concludes after 7-days and the proposed change must receive approval from 50% of the current Committee members (excluding abstentions) before the PR is merged. If the vote was successful, only then may the PR be merged.

If the desired change to the PRIF specification is only related to minor textual fixes, including: corrections to typographical errors, formatting improvements or updates to non-normative prose, then no discussion in a PRIF meeting is required. PRIF Committee members may immediately open up a PR with such changes. In order to be merged, the PR requires an approval from the Technical Lead and one other Committee

member (other than the original author). For those who are not PRIF Committee members, please email any minor textual fixes to the PRIF mailing list.

To produce a new revision of the specification, a vote of the full Committee takes place (see next section) which concludes after 14-days, and must receive approval from 50% of the current Committee members (excluding abstentions). The vote will determine whether the changes already merged to the draft specification, at a specific Github tagged commit, are sufficient to produce a new official revision. Any PRIF Committee member may trigger this vote by written request to the Community Lead, but it shall not take place within 30 days of a prior vote on the same content.

If the vote succeeds, the Technical Lead shall appoint an editor to produce a PDF candidate for the new revision. The editor subsequently shares the resulting candidate PDF with the PRIF Committee members and begins a 7-day comment period for minor presentational concerns. Once any such concerns are resolved, the editor publishes the final PDF as the new official specification.

5 Full Committee Voting Procedure

When full Committee votes occur, each Committee member may register their vote with the Community Lead either during a meeting or via electronic communication. Any votes against must be accompanied with a brief written statement from the member. The Community Lead shall announce the results of the vote on the mailing list, including the tally of how each member voted and any written comments provided by members during the vote.

6 Changes to Governance and Code of Conduct

Any proposed amendments to the PRIF governance policies (i.e. this document or the associated community code of conduct) follow the same processes as those documented above for amendments to the PRIF specification itself.

As an exception to the above, the Community Lead may (without voting) update the Current Committee Roster in accordance with the governance process, as described in 'Requirements to become and stay a Committee member'.

7 PRIF Mailing List

If you would like to contact us about joining the PRIF Committee, suggest changes to the PRIF specification, ask questions about PRIF, or generally stay updated about PRIF, please email or join the [public Google group prif-spec@googlegroups.com](mailto:prif-spec@googlegroups.com)