Introducing the Actionable Guidelines for FAIR Research Software Task Force

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Actionable FAIR4RS Task Force

Background

Background FAIR Principles

The FAIR (Findable, Accessible, Interoperable, Reusable) Principles (2016) are high-level instructions to make research outcomes reusable

Widely adopted across fields of research and by all stakeholders including researchers, funders, and scientific publishers

Background FAIR4RS Principles

FAIR Principles for Research Software (FAIR4RS Principles, 2022) are adaption of the FAIR Principles for research software

- F1. Software is assigned a globally unique and persistent identifier.
 - F1.1. Components of the software representing levels of granularity are assigned distinct identifiers.
 - F1.2. Different versions of the software are assigned distinct identifiers.
- F2. Software is described with rich metadata.
- F3. Metadata clearly and explicitly include the identifier of the software they describe.
- F4. Metadata are FAIR, searchable and indexable.

(and more)

BackgroundFAIR-BioRS guidelines

FAIR Biomedical Research Software (FAIR-BioRS) Guidelines (2023) are actionable guidelines for complying with the FAIR4RS Principles

- Work from a version controlled system platform (e.g. GitHub)
- Select a license and include a LICENSE file
- Include metadata in codemeta.json, CITATION.cff, CHANGELOG, README
- Archive source code on a DOI-issuing repository like Zenodo
- Etc.

Immense contribution from the BOSC community!

Background

Limitations of the FAIR-BioRS guidelines

The FAIR-BioRS guidelines were developed only through inputs from the biomedical research community so they cannot be generalized as is



The 2 year survey of the FAIR4RS Principles highlights the need for generalized actionable guidelines

Background

The Actionable Guidelines for FAIR Research Software Task Force started in December 2024 under the Research Software Alliance (ReSA)



Establish actionable guidelines (i.e. guidelines that provide practical steps) to make any research software FAIR in line with the FAIR4RS Principles

New challenges compared to the FAIR-BioRS effort

How to develop domain-agnostic guidelines?



How to address open vs closed source software?

How to keep up with evolving standards?

Members



~12 active members



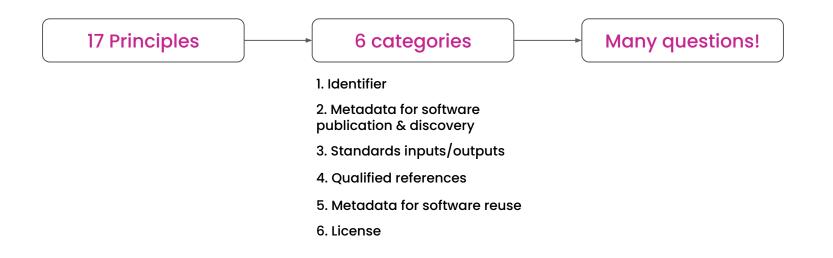
Various geographical locations (USA, Canada, Germany, Spain, UK, Netherland, etc.)



Various research domains (Biomedical, Data Science, Knowledge Representation, etc.)

Progress

Task 1: Interpretation of the FAIR4RS Principles (Dec 2024 - March 2024)



Timeline

August 2025

Complete sub-groups investigations

October 2025

Release first draft for community feedback January 2026

Publish first version of the guidelines February 2026

Maintain guidelines



https://www.researchsoft.org/tf-actionable-fair4rs

Thank You!





Find these slides and all resources here



