HSF (Affiliated) SW Projects

HSF Core Coordination Team

WLCG-HSF Workshop 2024, DESY Hamburg

Goal of this Presentation - Feedback

HSF can **facilitate collaboration** on SW development, and **enhance availability/visibility/recognition** of software falling in these two categories:

- HSF projects and software, developed with/by HSF [HSF GitHub repository]
    - Direct input and maintenance from active HSF members
- HSF **affiliated** projects and software
    - Community projects with dedicated person power
    - No HSF control or responsibility for maintenance, their own repository
    - Can benefit from community visibility that the HSF provides

We would like feedback on the procedures we are proposing to put in place, coming from this document prepared by the core coordination team.

Engagement, Endorsement and Review of Projects

- Engagement: In order to make a software project/product a HSF affiliated one
    - We welcome project with broad community engagement
    - Proposal: Projects approach HSF through the HSF Core Coordination Team
- Endorsement: by HSF Core Coordination Team (CCT) after evaluation and open consultation
    - Short evaluation by CCT, relevant WG conveners, community experts
    - Evaluation is public and advertised in the HSF Forum
- Reviews: Project reviews with experts
    - Assessing aspects from requirements to implementation
    - Always at the request of the projects or experiments
    - HSF CCT matches project to appropriate external experts

How does the project get recognised?

- List of HSF (affiliated) projects hosted in dedicated web area
- All HSF (affiliated projects) have to commit to software sustainability practices
- Propose GitHub badges depending on maturity, community support and update, engagement and implementation of software sustainability practices
    - Bronze: young effort, evolving from few (1 collaboration) users to more, commitment / striving to meet sustainability practices
    - Silver: more mature effort, strong community support, guaranteed maintenance in the medium term, high standards of software sustainability
    - Gold: adopted by several collaborations and/or experiments, strong long-term support from developers and community, highest software sustainability standards
- Annual Project Awards

Best-practice guidelines

- Still in flow - evolving checklist
- Start from https://hepsoftwarefoundation.org/project_guidelines.html
    - Guidelines, not strict requirements
- Can incorporate other community guidelines
    - See e.g. EVERSE project talk on Friday
    - Other efforts in the US, e.g. FAIROS (reinterpretation-focused), FAIR4HEP (AI-focused) …
    - FAIR for Research Software (FAIR4RS principles)

Requirements and Reference Implementation

- Realisation of HSF (affiliated) project in practice: *reference implementation*
- Start from a whitepaper (problem, general idea of solution)
    - Solicit community input to agree on problem formulation, specific/concrete requirements
    - Get endorsement ("this problem applies to me") from experiments / communities
- Use whitepaper as basis for API implementation
- HSF can facilitate development of solutions
    - Model for this process: conditions database used for sPHENIX starting from HSF Conditions Database WG, [2401.16274] (talk later this afternoon from Lino)

Letters of support

- We already have a mechanism: [Letters from the HSF](#)
- Letter of **cooperation**: general support for projects aligned with HSF goals
- Letter of **support**: specific support for a project where HSF will be an active collaborator
    - Requires circulation to the whole HSF community
- Mechanism: request to coordination team, then circulate

Funding

- The HSF doesn't have a budget…but it can help with

(1) Facilitating connection between sponsors and small grants for travel support at international events (e.g. early career researcher wants to present HSF software project at a conference)
(2) Highlighting external funding opportunities and providing advice

Some Brainstorming Points for Discussion

- Do Project Leaders think the concept of affiliation is useful?
- Is there more we can do to recognition of software developers / Research Software Engineers?: are badges enough?
- How does the MC generator community fit in this discussion?
- …