

FAIR DIGITAL OBJECTS FORUM

FDO Bulletin 2021-2 September 2021

Participate in the CIM Meeting at 14.10.2021

FDO Forum

The FDO Forum is based on voluntary work and after roughly six months now a few limiting circumstances have become clear: (1) our documentation and dissemination activities are not as professional as we would like to have them; and (2) many of the experts engaged in FDO work have multiple competing priorities and as a result some of the work is delayed. We expect to have some support for our work from 1.1.2022 but we would also welcome more volunteers to help us out.”

The FDO Steering Committee is not representative in all relevant dimensions. SC decided to give priority to the geographic dimension and will extend membership to other regions than Europe and North America. This implies that SC will become even larger (about 25 members) and more heterogeneous, and that the group of SC-Co-chairs will need to take more responsibility. The earlier decision has been confirmed that we will not start a governance discussion until the 1st International FDO Conference which will happen in October 2022. Instead, we first need to drive the concrete FDO specification and implementation work, and we need to stabilise the place in the dynamic landscape of collaborating initiatives (RDA, CODATA, WDS, GOFAIR, DONA, IDF, etc.).

Community Engagement

FDO SC is aware of the criticism that some feel that the FDO Forum is a closed club. This is partly true in so far as we decided to leave it to the working groups to decide about their mode of operation. For the FDO Forum it is important that the WGs are making progress on what they promised to deliver. Of course, everyone who has a suggestion for an activity that can improve the FDO related work, and which is not yet or not sufficiently represented by the existing WGs could make a proposal for a new WG. It should be noted that the FDO Forum expects that WG members devote some percentage of their time on FDO matters.

On the other hand, we see the increased need to not only present the state of work and current plans but to also listen to and discuss comments which of course may include critiques, since there are many experts out there who have deep knowledge and practical experience, but due to time constraints, for example, cannot spend a certain percentage of time on FDO matters. Therefore, we will organise the following meetings:

- **1st Community Interaction Meeting (CIM) at 14.10.2021 from 14.00 to 18.00 CEST**
- Workshops on specific topics such as FDO Typing in the coming months
- Sessions at SciDataCon at 18. 10. 2021
- Philosopher Panel to interact about the pillars of a future data landscape probably at 19. January 2022
- Workshops with different stakeholders including policy makers and PIs of infrastructure projects/initiatives which needs to be worked out in more detail
- 2nd Community Interaction Meeting (CIM) in March 2022
- 1st International FDO Conference in October 2022

The FDO Forum is aware of the need to find appropriate channels to continue the interactions after the CIM meeting with interested experts. All reports of the FDO Forum groups to prepare CIM can be accessed here: <https://datashare.rzg.mpg.de/s/xueRPfzZJBviMON>

FDO Documents

All public documents will be available at the FDO Public share which can be found under this open link: <https://datashare.rzg.mpg.de/s/RTeYZGe3QMgEciH> .

Working Groups

1. Technical Specification & Implementation Group (TSIG)

TSIG started with discussions on how to construct a comprehensive **Technical Specification** of FDOs and found out that many sub-topics need to be addressed first to find a common language and to come to agreements. This phase resulted in quite a number of papers that need to be improved now to be presented at the CIM for discussions. Some of them are already public, others will be presented at CIM either in form of an improved document or in form of slides.

Public: FDO Base Definition, Gap Analysis

To be presented at CIM: FDO Configurations, Example of Speciman FDO, FDO Plug-In Concept, FDO Profiles, PID Profiles and Kernel Attributes, Note on Machine Actionability, First thought on FDO Framework specification improvements

To be discussed between TSIG, SEM and BIG: First thoughts on **FDO Typing**

Much detail work needs to be wrapped up now and then TSIG will focus again on writing the comprehensive **Technical Specification** of FDOs, identify further gaps etc. An interaction with the interested community is of great relevance now.

2. Basic Infrastructure Group (BIG)

BIG has regular meetings each month at the second Monday with an exception during the vacation period in August. At the kickoff meeting at the 10th of May we confirmed the two major topics of BIG which are the establishment of and an interoperable Type Registry landscape that need a well-defined semantical and technical framework for the definition of types and a roadmap heading to a universal and sustainable PID landscape based on large centres running services with high availability. The sessions had alternating emphasis on these two topics starting always with an introductory talk that opens the discussion leading to recommendations on the next steps to be taken.

3. Semantic Group (SEM)

The group held its kick-off meeting on June 1, where ideas around FDOs and a semantic model for FDOs were initially discussed. Subsequently, FDO-SEM co-hosted a session with [GO Inter](#) on "Towards a semantic model for FDOs" at the [FAIR Festival](#), June 21-23. The session identified well-scaling models for FDOs at different levels of granularity and compelling case studies as the most urgent desiderata. On August 31 FDO-SEM held a hackathon on a semantic model for FDO using the FAIR Digital Object Framework ([FDOF](#)) as a starting point. The hackathon started with an ignition talk by Luiz Bonino (GO FAIR), followed by an in-depth discussion of the proposed framework. The group then started to apply FDOF to a selected use case. A follow-up hackathon is planned for October.

4. Canonical Workflow Framework for Research (CWFR)

CWFR is working hard to create the special issue of the DI Journal on CWFR related papers where the deadline is 19.9.2021. After having had working meetings on Galaxy, Jupyter and RO Crate, we are now planning the next workshops. Two major topics have been mentioned: (1) presentation and discussion of papers presented to the special issue, (2) What can we learn from industry? The latter will include presentations and discussions of Apache UIMA (originally being developed by IBM for their Watson projects) and OPC Unified Architecture (as an approach chosen by the production industry to implement Industry 4.0). More details to come soon.

5. eInfrastructure Group (eING)

This WG participated in the eIRG workshop (<https://indico.fccn.pt/event/15/overview>) and presented concrete demonstrators from KIT Karlsruhe, University of Indiana and an integration of two repositories from CNRI (US) based on CORDRA and GWDG (DE) based on an instance of B2SHARE (EUDAT). The group is currently working on a joint paper that will include other groups to add their FDO related work and on a dynamic registry allowing people to add their use cases whenever suitable. The FDO Forum will use this registry to evaluate the situation, identify gaps and topics where consolidation will be required, etc. The essentials of the demonstrator paper will be presented at CIM.



Responsible for this FDO Bulletin are the FDO-SC Co-Chairs:
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