RDA Interest Group Charter

FAIR Digital Object Fabric
(Version 11 Oct 2021)
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Introduction:

"Excellent, leading research in many areas such as human brain analysis, health care, climate change, etc. are based on smart computations on large aggregated data collections. These collections exhibit a high complexity/heterogeneity in a number of dimensions such as spatial and time resolution, with the type of multidisciplinary data extending from linear time series to array data with that data's knowledge and information context expressed as relations between descriptive metadata which may be formalized as ontologies. Barrier breaking results that give new insights of how to deal with the big societal challenges need to rely on the availability of more efficient and cost-effective ways to make use of and combine all relevant data and software services which have been created." [from the RDA Data Fabric IG Proposal,
https://www.rd-alliance.org/sites/default/files/case_statement/RDA%20Data%20Fabric%20IG-v6.docx]

> **History "IG Data Fabric"**
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> The IG Data Fabric was originally founded in 2013 with the scope to harmonize and to orchestrate RDA's core components for a data infrastructure. Over the years one of the group's topics shifted more and more to the introduction and specification of FAIR Digital Objects as an overarching concept building up research data infrastructures.
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> The name of the IG Data Fabric is puzzling, confuses potential new RDA members, and promises a steep learning curve to the broad landscape of discussed topics . To address these issues and to focus the objectives, the members of the IG Data Fabric are proposing to change the name of the group to *FAIR Digital Object Fabric*.
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> This modified IG charter was discussed in the IG working meeting, September 23rd, and was open for an internal IG Data Fabric review and commenting period from September 27 until October 11.

User scenario(s) or use case(s) the IG wishes to address :

FAIR Digital Objects (FAIR DOs) describe a concept of virtual data objects that has been developed and used by RDA in various Working and Interest Groups. FAIR DOs may represent data, software or other research resources. They are uniquely identified by a Persistent Identifier (PID) and described by metadata rich enough to enable them to be reliably found, used   and   cited.
FAIR DOs are currently discussed world-wide, in many RDA groups, in the European Open Science Cloud, as well as in other initiatives with the need to design and develop large integrative research data infrastructures to facilitate findability, accessibility, interoperability and reusability (FAIR).

In RDA a communication and coordination platform aiming at

1. Creating international consensus about the specification of FAIR DOs,
2. Operation model (identifying processes) of FAIR DOs, and
3. Exchanging implementation details

is missing.

To address the topic of FAIR Digital Objects in RDA, a BoF session "BoF - Creating an RDA Interest Group on FAIR Digital Objects"
[https://www.rd-alliance.org/bof-session-creating-rda-interest-group-fair-digital-objects]
has been organized at Plenary 15. More than 40 participants discussed various scenarios of integrating the topic into RDA's landscape prominently. As a consensus it has been proposed to make use of the existing RDA IG Data Fabric and to focus the scope of the group.

Objectives:

The IG FAIR Digital Object Fabric will provide a communication and coordination platform aiming at:

Furthermore, the group will
- Regularly present show cases demonstrating the usefulness and practical implementation of FAIR DO principles
- Report and discuss implementation experiences and challenges
- Bridge with the work in the FAIR Digital Object Forum [https://fairdo.org/] and connect to related digital publishing activities across the globe
- Create formal outputs and RDA Working Groups focusing on specific problems

Participation:

The IG invites all members and communities building research data infrastructures to bring in their expertise, to advance, and to propagate the FAIR Digital Object concept. This includes the expertise of a broad range of stakeholders, starting from data producers, infrastructure developers, data stewards, up to policy makers and funders.
Furthermore, the group will bridge actively with the FAIR Digital Object Forum initiative. Many of the initial members are already members of the "old" IG Data Fabric as well active members of the FAIR Digital Object Forum.

Outcomes:

The group works in a pragmatic manner and is focused on real-life implementations rather than producing textual reports and specifications.

The group will continue to
- discuss the FAIR Digital Object concept,
- organize project shares,
  see https://www.rd-alliance.org/group/data-fabric-ig/wiki/monthly-meetings,
- collect and share information, see
  https://www.rd-alliance.org/group/data-fabric-ig/wiki/rda-ig-data-fabric-fair-digital-objects, and
- organize RDA Plenary sessions.

Mechanism:

The group operates following the RDA guiding principles of openness, consensus, inclusiveness, harmonization, community-driven, and non-profit & technology-neutral. All discussions and outputs will be open to all RDA members and beyond. Outputs and results will be derived by consensus within the IG.

The IG will continue to organize monthly meetings and plenary sessions.

Timeline:
- organize 10 meetings and project shares
- organize two plenary sessions

Initial Group Members:

The group will continue with the members of the original IG Data Fabric. Beyond that, some members expressed their future roles under the new charter of the IG FAIR Digital Object Fabric:

First name	Last name	Email	Role & contributions	Country
Lori (Xin)	Chen	chx@cnic.cn	Initial co-chair	China
Rob	Quick	rquick@iu.edu	Initial co-chair	US
Rainer	Stotzka	rainer.stotzka@kit.org	Initial co-chair, contributor, member	Germany
Andreas	Pfeil	andreas.pfeil@kit.edu	Contributor: ● FAIR DO testbed ● Kernel Information Profiles	Germany
Rossella	Aversa	rossella.aversa@kit.edu	Member	Germany
Rob	Hooft	rob.hooft@dtls.nl	Member	NL
Maggie	Hellström	margareta.hellstrom@nateko.lu.se	Member/contributor	Sweden
Stian	Soiland-Reyes	soiland-reyes@manchester.ac.uk	Member Contributor: RO-Crate	UK
Zachary	Trautt	zachary.trautt@nist.gov	Member/Contributor	US
Nick	Juty	nick.juty@manchester.ac.uk	member	UK
Stuart	Chalk	schalk@unf.edu	Member	USA
Willem Jan	Knibbe	willemjan.knibbe@wur.nl	Member	Netherlands
Ben	Schaap	ben.schaap@wur.nl	Member	Netherlands

(Initially we have defined 3 roles: initial Co-Chair, member, contributor; multiple roles are possible)