Collaborative and Interoperable Data Management Plans in Data Stewardship Wizard

DSW

ds-wizard.org

The Data Stewardship Wizard (DSW) has become a distinguished ELIXIR tool for creating smart data management plans. Its **development is strongly user-feedback driven,** which allows the DSW to stay up-to-date with users' needs and their expectations. The whole DSW team supports and works closely with individual users as well with organizations on their maximum quality in use and any type of feedback is very welcome and important for improving the DSW. This close engagement with the DSW community lately resulted in several improvements and development of new features. One of them is **Live Collaboration** – it gives users the opportunity to be working on the data management plan (DMP) in their teams together in real time. Easy **sharing of a DMP** or **interoperability with other tools** are another examples of the newly introduced features. We expect that a recent **Advisory Board meeting**, upcoming BioHackathon Europe and other DSW activities will bring more ideas for possible improvements and new features in near future.

Project Sharing

Devising and composing a Data Management Plan is an activity in which all project team members should participate. Firstly, each team member may have some specific experience or knowledge that can help to work with data more efficiently. Secondly, everyone should be aware of decisions that will directly affect the data stewardship of their projects. For these reasons, we refined projects sharing in the DSW. A questionnaire is now grouped together with related exported documents, preview, and settings as "Project". Now it is now straightforward to change permissions for a specific project. You just press "Share" and select if the link to the questionnaire should provide read-only or full access. Such links can be shared with other logged-in users as well as publicly with anyone who is not registered in the DSW.

Live Collaboration

Another essential feature for efficient collaboration on Data Management Plans is also inspired highly by existing services such as Google Docs. When you share a project using a link, you can work on it together in parallel and see changes made by others directly, i.e., live. You can also clearly see who has the project open in their browsers. To further enhance user experience, all changes are continually and automatically saved. Whenever you need to see how your Data Management Plan looks like for current replies in the questionnaire, you just switch to preview and see the document. Similarly, you can easily investigate FAIR evaluation of the replies. The TODOs feature is now also easier to access. This significant improvement of questionnaires in DSW is just another step in how we help researchers to benefit from making a DMP.
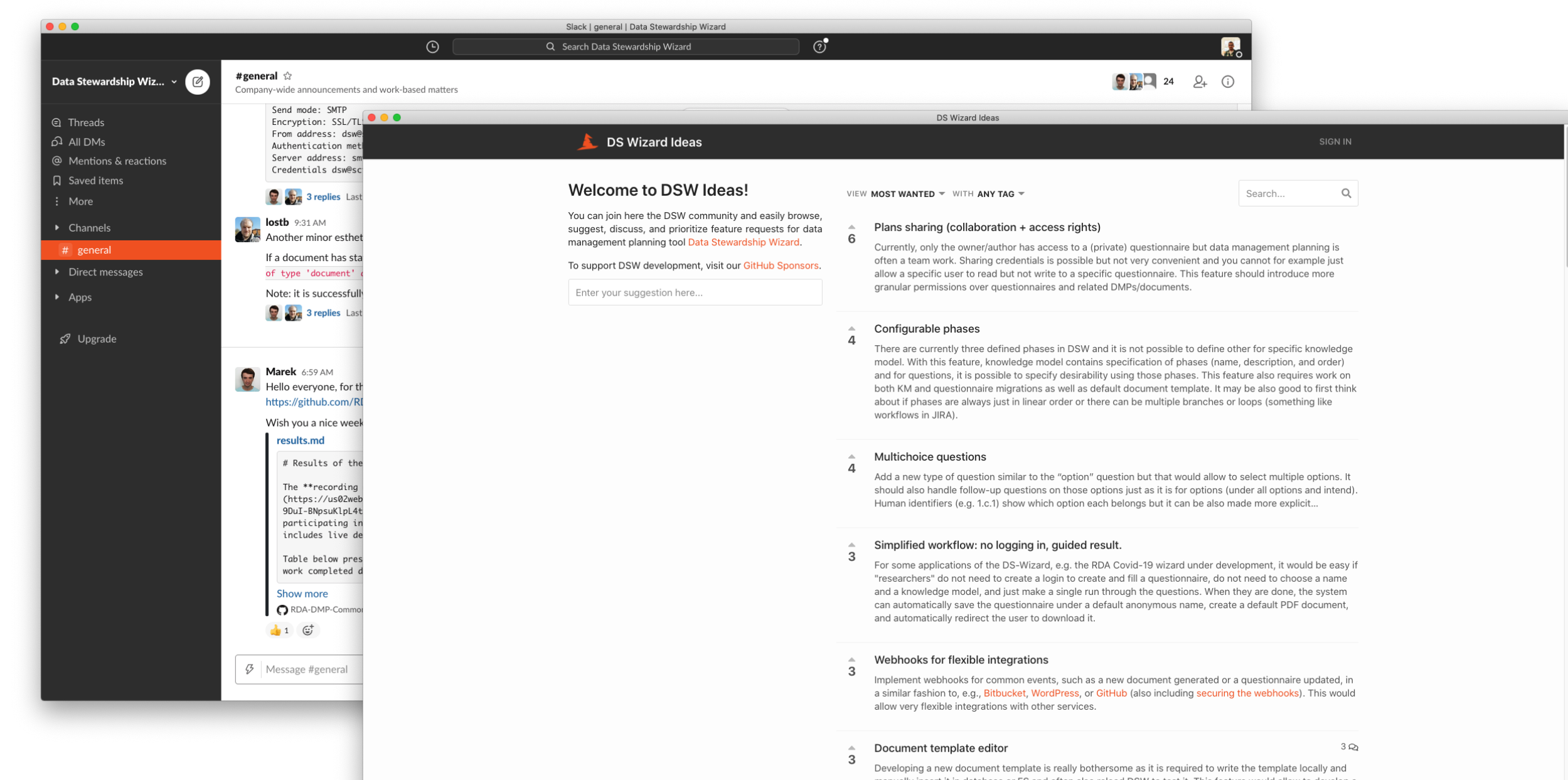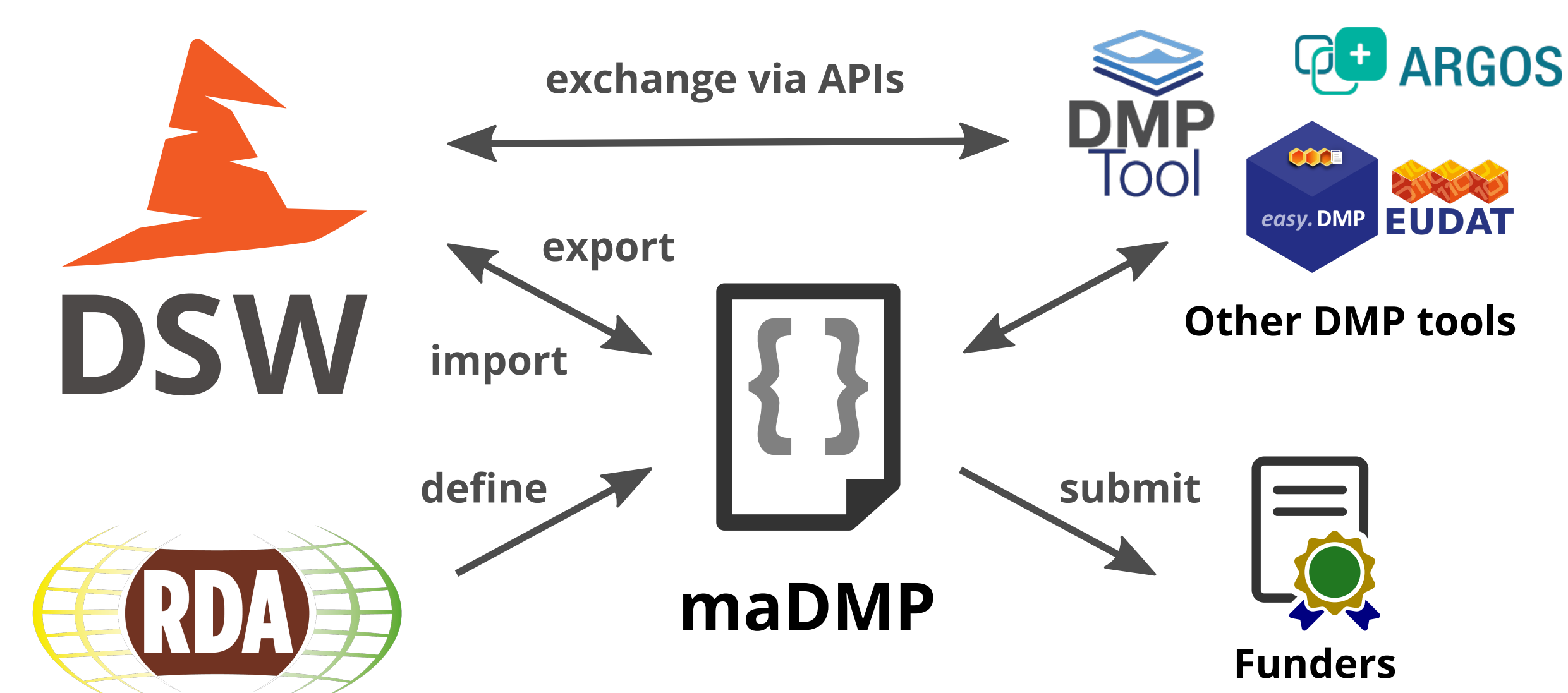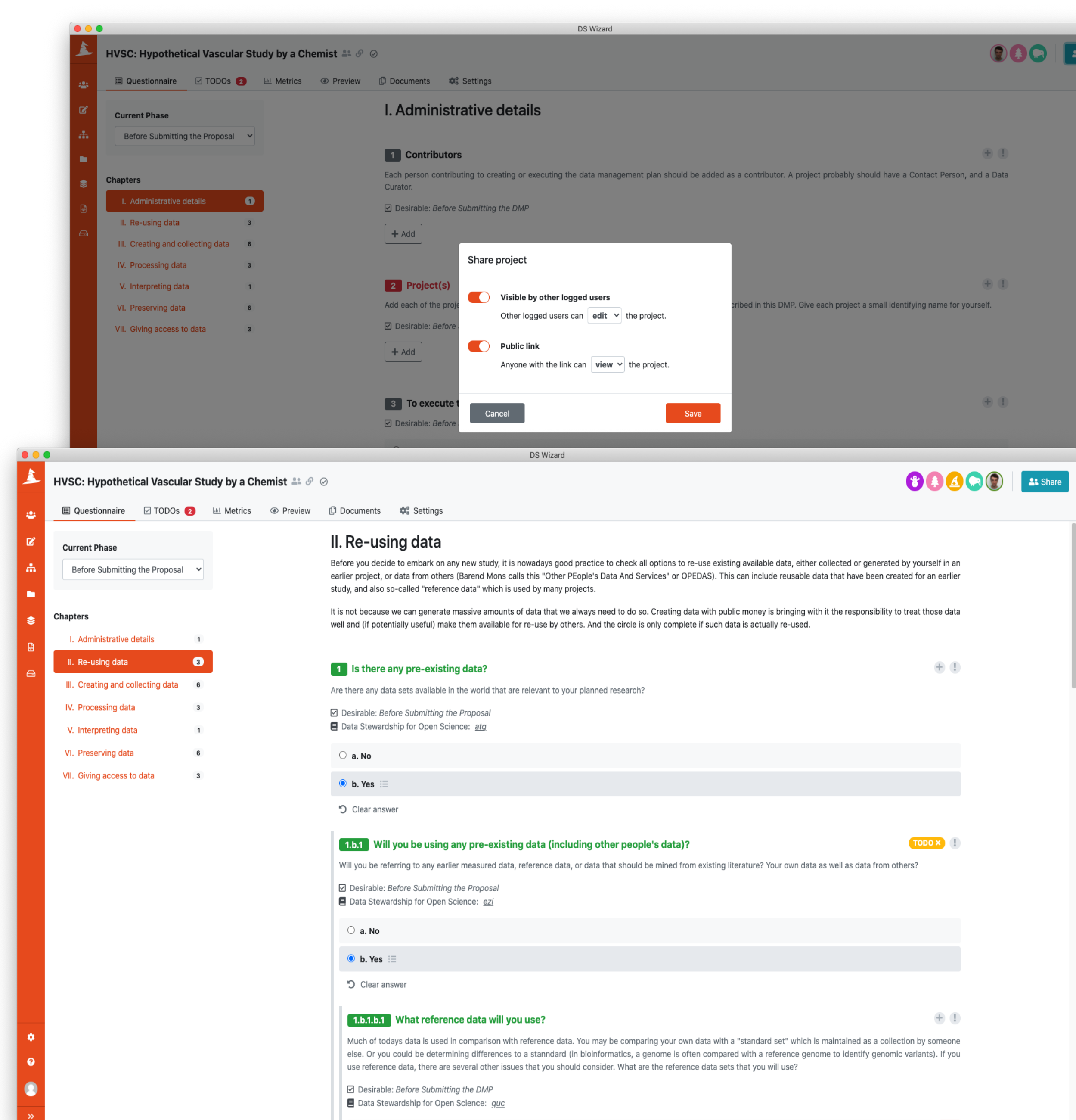
Machine-Actionable DMPs

The DSW development team actively participated at the RDA Hackathon on maDMPs 2020 focused on interoperability using the RDA DMP Common Standard (DCS). The DSC is defined as a JSON schema for DMPs represented as JSON. It describes the core information about project, funding, ethical issues, costs, as well as used datasets, distributions, and licenses. First, we mapped and adjusted our "root" data stewardship knowledge model according to the standard. That allowed us to create an export template to JSON in a very direct way. A prototype of the other direction, to import a maDMP into a questionnaire, has been developed, as well. That allows bi-directional interoperability with other DMP tools that are compliant with the DCS standard. Furthermore, we managed to submit maDMPs directly from DSW to DMPTool and also export maDMP in RDF formats using DCS Ontology.

Call to Action

As the DSW is strongly user-feedback driven, we encourage our users to share their experiences working with DSW with us to keep up with their needs whenever possible and to make creating DMPs easier for them. We recently launched DSW Ideas page (ideas.ds-wizard.org) where users can easily browse, suggest, discuss, and prioritize feature requests for the DSW. Also, the newly established Advisory Board consisting of 11 eminent experts and academics specialized in the field of data management planning, data stewardship, data FAIRification, and other related fields further help us to steer the DSW development the right way. We invite you to become a part of the project, too, by actively using the DSW and letting us know about your experience and ideas for improvements.

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