

# Final Report

## [Mapping Resources for SHARE]

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### Executive Summary

Scientific research relies on a fragmented experimental record; contributions are scattered across a variety of independent web sites and applications. SHARE brings together data from several web-based applications commonly used by researchers. SHARE makes use of Application Programming Interfaces provided by third parties, it retrieves data and brings it down to a common data model; some of SHARE sources include, CrossRef, VIVO, Dryad and many other datasets. Data from these sources is usually related; however, such relations are not specified. Mapping Resources for SHARE aims to make it possible for users to establish such relations; the formalization of such relations is transparent for the end-user. We are using the Distributed Scholarly Compound Object (DISCO) and Research Object (RO) models in order to formalize the relations across digital objects available in SHARE.

**Software availability:** <https://ro2share.github.io/>

**DEMO:** <http://ro2share.labs.linkingdata.io/>

### Objectives

- i) ORCID authentication module, this will make it possible to, via the ORCID API, authorize the use of their ORCID (<https://orcid.org/>) information.
- ii) SHARE gathering module, once authorized by ORCID, this module will gather from SHARE ([share.osf.io](http://share.osf.io)), using the SHARE API, the records under the name provided by the ORCID authentication module.
- iii) Claim module, this module makes it possible to claim a record and assign relate it to the ORCID ID.
- iv) Module for Relations, this module allows to establish associations amongst claimed records from SHARE.
- v) Export and Storage Module, this module exports the resulting aggregation of metadata gathered from ORCID, SHARE and the relations amongst records using the Resource Descriptive Framework format. This module also stores the generated data in a SPARQL endpoint that will be publically available.

### Initial State

SHARE brings together digital objects from several web repositories. The relations across these digital objects are not specified. Moreover, there is not always a relation between the object and the corresponding ORCID that may be the owner or users of the object.

## Project Outcomes

- Final Report
- Software, available at: <https://github.com/LinkingDataIO/RO2SHARE>
  - Docker: <https://github.com/LinkingDataIO/RO2SHARE/blob/master/Dockerfile>
  - Webserver: <https://github.com/LinkingDataIO/RO2SHARE>
  - Client: <https://github.com/LinkingDataIO/RO2SHARE-client>
- The resulting dataset is available at:  
<https://github.com/LinkingDataIO/RO2SHARE/blob/master/tests/dataset.ttl>
- The resulting dataset has been tested by:
  - <<http://orcid.org/0000-0002-7138-3542>>
  - <<http://orcid.org/0000-0003-4727-9435>>
  - <<http://orcid.org/0000-0002-1267-0234>>
  - <<http://orcid.org/0000-0002-1304-8447>>
  - <<http://orcid.org/0000-0002-9354-8328>>
  - <<http://orcid.org/0000-0003-1238-2539>>

### Module 1

ORCID authentication module

### Module 2

External Resources gathering module.

### Module 3

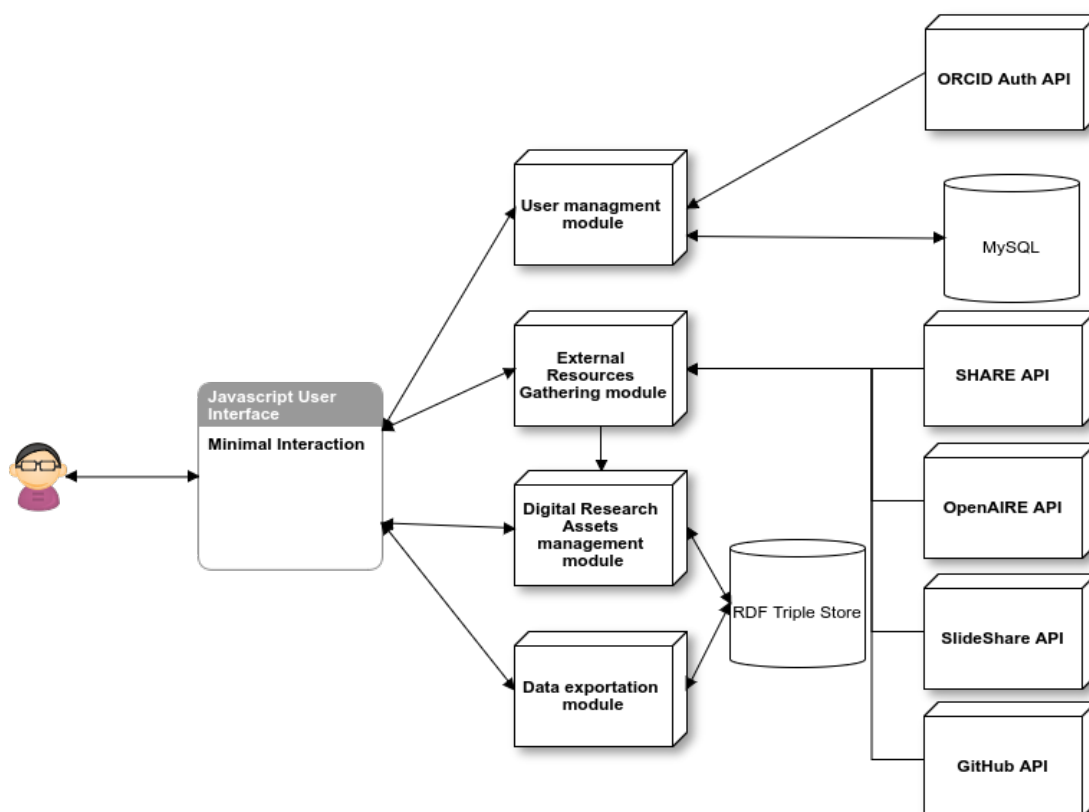
Claim module

### Module 4

Module for Relations.

### Module 5

Export and Storage Module.



## Dissemination Activities / Publications

No dissemination or publications were planned. However, we are currently working on a publication that we will submit to F1000 by January 2018.

## Summary & Conclusions

This work makes it possible for researchers to establish relations amongst digital assets in different repositories. It generates the corresponding DISCOs, bundles of metadata. This facilitates the relation between ORCID and RDAs. It also makes it possible to establish the relation between ORCID and GIT Ids –as more repositories are added, more relations like this one will be able to assert.