Share Family membership
applying LOD Platform technology

The Share Family and the National Bibliographies initiative

The [Share Family](#) of initiatives supports libraries, archives and museums in the transition from traditional cataloguing environments to innovative models based on linked data. The initiatives stemmed from the Share Family aim to explore and embrace the future of library catalogues, creating effective tools and environments that facilitate the cataloguing, exposition and discovery of bibliographic descriptions in linked data and providing a comprehensive suite of instruments to information professionals across the LAM domain.

Based on collaboration within the Library, Archives and Museums community, the Share Family initiatives are shaped and furthered thanks to the active participation of an international group of national and research libraries and bibliographic agencies.

The Share Family principles and expertise can be applied across the entire LAM sector and tailored to specific domains or disciplines, each with varying and distinct characteristics. The Share Family currently comprises the following specialised initiatives:

- [Share-VDE: Virtual Discovery Environment in Linked Open Data](#)
  The collective Linked Open Data (LOD) catalogue of a growing number of leading academic and national libraries from across Europe and North America.
- [National Bibliographies in Linked Open Data](#)
  The aggregation of data from National Bibliographies in a shared entity discovery environment; the first of these is the British National Bibliography, soon to go into production.
- [Program for Cooperative Cataloging (PCC) Catalogue in Linked Open Data](#)
  The open pool of PCC-quality BIBFRAME data.
- [Share-Catalogue: Scholarly Heritage and Access to Research](#)
  The joint LOD platform for a network of Italian university libraries.
- [Parsifal: Integrated Catalogue in Linked Open Data](#)
  The LOD portal of the URBE consortium (Roman Union of Ecclesiastical Libraries).

- [LILLIT: portal for Italian illustrated books 1501-1800](#)
  Linked Open Data descriptions and illustrations of Italian editions printed in the 16th-18th centuries.
- Share-Art, Share-Music and Share MIA
  Three pilot projects for shared environments in the domains of Art, Music and Manuscripts, Incunabula and Ancient books, respectively.

The direction taken and decisions made by the Share Family are influenced by discussions on new models of data organisation such as BIBFRAME and by the vision of the [LD4P](#) - Linked Data for Production project. The initiative is promoted by the bibliographic agency [Casalini Libri](#) and the technology behind the community, including the [LOD Platform](#) framework, is developed and maintained by [@Cult](#), ILS provider and software house specialising in the design and creation of solutions for information management and knowledge sharing.
Casalini Libri provides linked data services derived from the LOD Platform in conjunction with its sister company @Cult. The services and functions described below are associated with the Share Family of initiatives, including the National Bibliographies (NatBib).
For broader context, read the [Executive summary of the National Bibliographies initiative](#).

Services provided & Library commitment

For new members the initial library dataset submission is requested. A number of options are available for the subsequent updates provision. Bibliographic data policies, in any format, are governed by the respective library and the data is made available to the library community.
No multi-annual commitment is required.

Starting from the data of participating libraries, the following deliverables and services are supplied (described more extensively in the summary of [components of the LOD Platform framework](#) and in the [public documentation](#)).

National Bibliographies membership

The aim is to guarantee the cultivation of a library's bibliography in linked data over time through:

- the Share Linked Data Lifecycle Support (LDLS);
- the Cluster Knowledge Base (CKB);
- the Share platform as a common Discovery System (SVDS).

Membership includes:

- the initial conversion of library bibliographic data to create homogeneous datasets in linked data, reconciled in the Cluster Knowledge Base - a common data pool shared by participating institutions (D1);
- the provision of the enhanced MARC21 version, if useful to the institution (D2);

- the output dataset made available as a linked data environment and SPARQL endpoint, with the use of application profiles;
- the publication of the data applying the BIBFRAME model on the entity discovery portal;
- an API layer giving access to services such as most recent (new/modified/cancelled) library data, connections to ILS/LSP, dissemination of data to ILS/LSP.

Processes include:

- entity detection and identification;
- data reconciliation with the attribution of the Share community entity identifiers;
- data enrichment and conversion into BIBFRAME for all resource types with the latest version of mappings, including other vocabularies when needed;
- conversion into MARC21 with external URIs, using the library's preferred sources.

The Share Family membership makes institutions actively involved in numerous initiatives and - at their discretion - in various working groups activities. Among them: Advisory Council, Sapientia Entity Identification, Authority/Identifier Management Services, Cluster Knowledge Base Editor, User Experience/User Interface, National Bibliographies working groups.

In addition, the membership provides:

- bug resolution and standard platform enhancements;
- system administration;
- hardware and connectivity (in remote hosting/cloud services);
- triplestore commercial license;
- project management.

Extensions and additional deliverables

The following are possible extensions or additional deliverables:

- exploitation of the multitenancy approach to fulfill the different needs of specific library communities;
- configurability of the data grouped and presented according to consortia domain needs (union catalogue mode);
- custom APIs for further partner interoperability, for example with lending services;
- institutional branding options of the user interface (institutional skin portal);
- JCricket editor for a collaborative environment to manage entities represented in RDF;
- services for authority control that can be applied in customizable configurations.