**An effective environment
for the use of linked data by libraries**
Share-VDE short overview

Share-VDE is a library-driven initiative which brings together the bibliographic catalogues and authority files of a community of libraries in a shared discovery environment based on linked data.

Share-VDE is a collaborative endeavour, based on the requirements and perceptions of libraries, promoted by Casalini Libri, provider of bibliographic and authority data as member of the Program for Cooperative Cataloging; @CULT, provider of ILS, Discovery tools and Semantic Web solutions for the cultural heritage sector, with input and active participation from an international group of research libraries and influenced by the vision of the LD4P project.

The collaborative initiative is steered by the library community.

Share-VDE currently connects the catalogues of over 20 libraries in the US and Canada, and is now expanding to a broader network including European libraries. It is potentially open to any library.

How it works

The Share-VDE advanced discovery interface harnesses the potential of linked data to offer an easy and intuitive user experience and deliver ever more wide-ranging and detailed search results to library patrons.

Library catalogues of participating institutions are converted from MARC to RDF (Resource Description Framework) using the BIBFRAME vocabulary and other ontologies, through a process of entity identification, reconciliation, and data enrichment also from external sources, in order to form clusters of entities such as Person, Work etc. The network of resources created is published as linked data on Share-VDE platform and a common knowledge base of clusters accessible in RDF, open to the entire Share-VDE community, has also been compiled. The knowledge base uses the model of the Semantic Web while allowing participating libraries to continue handling their own data as independently as possible.

In addition to inclusion in the Share-VDE database, each individual library receives the information corresponding to its own catalogue in linked data; this may be re-used according to local requirements and with no restrictions.

Main areas of focus

Building on the foundations laid by the previous project phase started in October 2016 and on continuous R&D activities carried on by ad hoc working groups, Share-VDE is now implementing production-level processes and additional workflows according to priorities determined by the Share-VDE community. The main areas of focus are:

- enrichment of MARC record with URIs;
- conversion from MARC to RDF using the BIBFRAME vocabulary (and other additional ontologies as needed);
- creation of a virtual discovery platform with an adaptation of the BIBFRAME data model developed to provide a linked data discovery option;
- creation of a database of relationships and clusters of library materials (Sapientia Cluster Knowledge Base) accessible in RDF;
- implementation of tools for direct interaction with the data, permitting the validation, update, long-term control and maintenance of the clusters and of the URIs identifying the entities;
- batch/automated data updating procedures;
- batch/automated data dissemination to libraries;
- progressive implementation of further use cases in the priority order defined by the community.

Benefits

The shared platform increases discoverability of resources in library catalogues and reveals data that would otherwise have remained hidden in archives, allowing end users to access a wealth of information that may be both imported and exported by participating institutions. Among the main benefits:

- enrich library data with URIs and additional information previously unexpressed under MARC21;
- allow librarians a wider and direct interaction with bibliographic data expressed in linked data through the Cluster Knowledge Base editor and the URI Registry;
- deliver richer search results to library patrons thanks to the potential of linked data and advanced discovery interfaces;
- keep pace with Semantic Web applications;
- collaborate with the linked data for Production (LD4P) initiative and the Program for Cooperative Cataloging (PCC) on the application and understanding of linked data;
- follow developments relating to the original production of data in BIBFRAME format and workflows based on linked data.

How to participate

Institutions wishing to find out more or interested in participating in the Share-VDE may contact the group at info@share-vde.org.