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 part of the Share Family, 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 USA, Canada, and Europe. 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 linked data using the BIBFRAME vocabulary and other ontologies, through a process of entity identification, reconciliation, and URI enrichment also from external sources, in order to form clusters of entities such as Agent, Work etc. The network of resources created is published as linked data on the Share-VDE platform and a common CKB - Cluster Knowledge Base named Sapientia 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 the inclusion in the Share-VDE database, each library receives its catalogue converted to linked data; this may be re-used according to local requirements and with no restrictions. Share-VDE is independent of the local ILS and of the format of original library records, accepting all formats including MARC21 and UNIMARC.

From September 2021, the new version Share-VDE 2.0 is live at https://svde.org with an enhanced Entity Discovery Portal and Linked Data Management System. The previous version at https://share-vde.org/ will be active in parallel to Share-VDE 2.0 until the migration of libraries’ data on the new system is completed.
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 to bring linked open data into practice according to priorities determined by the Share-VDE community. The Share-VDE and Share Family components are supported by the LOD Platform technology framework. Among the main components:

- data reconciliation, enrichment and conversion processes based on the latest version of Share-VDE entity model compatible with both BIBFRAME and IFLA LRM;
- the configuration of the entity discovery portal within the Share-VDE branch, or as a separated tenant with a dedicated data pool and user interface skin;
- a new generation of services for the authority control;
- the 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 through the J.Cricket Cluster Knowledge Base editor;
- batch/automated data updating procedures;
- batch/automated data dissemination to libraries;
- the 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 J.Cricket Cluster Knowledge Base editor;
- deliver richer search results to library patrons thanks to the potential of linked data and to the advanced entity discovery portal that relies on quality data and on authoritative data sources;
- 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 can refer to the wiki https://wiki.svde.org. To participate in Share-VDE please contact info@svde.org.