Share-VDE: supporting the creation, management and discovery of linked open data for libraries

Executive Summary

Approved by the Share-VDE Advisory Council on December 7th 2022

What is Share-VDE?

The Share Virtual Discovery Environment is a suite of innovative tools and services, developed and driven by libraries, for libraries, in an international collaborative, consortial effort. Share-VDE enables the discovery of knowledge to increase user engagement with library and cultural heritage collections.

Share-VDE supports members through the transition from bibliographic data in traditional formats to linked open data, leveraging the cooperation, data, resources and expertise of libraries around the world to offer a flexible, sustainable and collaborative approach to putting linked open data into practice.

The Share-VDE partners guide every step of the development process, from theory to implementation. Input from the Advisory Council and specialized working groups ensures that the Share-VDE data model and tools stand up to the complexity of real-world application. Our members' expertise provides in-depth analysis, studied design and iterative development of each component throughout its lifecycle.

Innovative framework and authoritative Knowledge Base

Committed to open data sharing and reuse, Share-VDE converts, structures and publishes authority and bibliographic data as linked data, regardless of the source format.

Using the Bibliographic Framework Initiative (BIBFRAME) data model, with carefully defined extensions, Share-VDE provides a dynamic and discoverable linked data framework that is compatible with the International Federation of Library Association and Institutions Library Reference Model (IFLA LRM). Share-VDE stores and maintains converted member data in a shared linked open data knowledge base, which provides a reliable and up-to-date source of data for all participating libraries, while preserving the integrity of their individual collections by employing tenant architecture.

The Share-VDE components, designed to member specifications, reduce costs through collaborative effort, open data usage, and by leveraging new technologies at scale. Participant institutions can use the suite of tools individually or implement combinations to meet the myriad needs and use cases.

Tools and interoperability

To facilitate interaction with the shared knowledge base, Share-VDE offers a set of advanced tools for entity management and a dedicated editor for linked data editing. A range of custom APIs designed

for tools and systems used by its members (e.g. Alma, Folio, Sinopia; similar tools may also be developed to integrate with additional systems, to accommodate the needs of Share-VDE participants), allowing libraries to take advantage of the Share-VDE environment while continuing to work in their existing local systems, with the freedom to employ either traditional or emerging resource description formats.

Discovery

Share-VDE employs new linked data standards and technologies to increase the visibility of its members' collections. These standards optimize resource identification for efficient web-based discovery and support structured data exchange across a wide variety of domains. For libraries, archives and museums, the new standards allow for the seamless linking between catalogs and repositories in a discovery environment that is well suited to the multi-disciplinary needs of today's researchers.

A growing, international community

Share-VDE collaborates closely with the international community. In particular, Share-VDE has worked alongside the Linked Data for Production (LD4P) initiative and the Program for Cooperative Cataloging (PCC) on the application and understanding of linked data, and was selected in 2021 to create the PCC Data Pool, an open pool of PCC-quality BIBFRAME data. Also in 2021, the Share-VDE National Bibliographies Working Group was formed to work on a collective catalog of National Bibliographies. The British Library is the first library that is moving its national bibliography to the Share infrastructure, with others to follow. Share-VDE is also part of the wider Share Family initiative, supporting development for specialized domains and to further leverage shared expertise.

Flexible, sustainable and collaborative

Each Share-VDE member library receives the information corresponding to its own catalog in linked open data so that it can be used according to local requirements and with no restrictions. Variations cater for the quantity of data that libraries wish to store in their local systems, with the option of links pointing to other authoritative data pools.

The adoption of the path of the entity-oriented environment, a collective approach to quality bibliographic data and the collaborative development of a common infrastructure benefit all Share-VDE member libraries, with time, expertise and costs shared across the community.

By participating in Share-VDE, libraries invest in the opportunity to work together to shape and embrace the future of the emerging ecosystem of bibliographic data in linked data, facilitating the re-use of enriched and structured data and serving the research community with a new generation tool to access knowledge.

Share-VDE supports an Open Metadata Policy, for further information refer to the policy statement.

For further information on the opportunities, options and benefits for your institution, visit wiki.svde.org or contact info@svde.org. Members of the Share-VDE Advisory Council are also available to answer any questions and to discuss Share-VDE in more detail.