Interconnections in the Linked Data world

The Share-VDE experience

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Share-VDE: what it was and what it is
Linked data means interconnections

Without linked data

With linked data

Hamilton

Search results:

Hamilton

Search results:

Hamilton

Scottish politician

Margaret-Hamilton

Publisher

Hamilton

Musical work

Hamilton

Historical figure
From pilot project...

Phase 1
October 2016 – January 2017
1985 and 2015 imprint titles; 2,249,397 bib-records and 3,601,327 auth-records.

Phase 2
March 2017 – May 2018
The entire catalogues for all resource types; 94,378,728 bib-records and 24,150,238 auth-records.

Phase 3
Production environment: January 2019 - in progress
Share-VDE triplestore currently contains 24 billion quads of converted data and 400 million triples of clustered entities
...to active initiative

Share-VDE is a library-driven initiative to establish an effective working environment for the use of linked data by libraries within a global context.

Library data are enriched with additional information and relationships, and bibliographic and authority data are converted into linked data.

A virtual discovery platform with the structure based on BIBFRAME data model is created to simplify the way in which that data is consumed.

The network of resources created is the basis for the Share-VDE Sapientia Cluster Knowledge Base, the common authoritative source of clusters accessible in RDF, open to the entire Share-VDE community.
Share-VDE is a collaborative endeavour based on the needs of libraries, developed by:

the joint effort of the Share-VDE Advisory Council and of the Working Groups;

Casalini Libri, provider of bibliographic and authority data as member of the Program for Cooperative Cataloguing;

@Cult, provider of ILS, Discovery tools and Semantic web solutions for the cultural heritage sector;

influenced by the vision of the Linked Data for Production initiative;

with input and active participation from an international group of research libraries.
A network of interconnected data
A network of interconnected libraries
The Share family
(Some of) Share-VDE interconnections
A matrioska of linked data
Share-VDE tenants

Common Share User Interface

Share-VDE portal (skin 1) - Share-VDE tenants
Share-Art portal (skin 2) - Share-Art tenant
Share-Catalogue portal (skin 3) - Share-Catalogue tenant

Sapientia (Share Cluster Knowledge Base)

External sources (VIAF, ISNI, LCSH, FAST)

Share-VDE

Share-Art

Share-Music

External sources (VIAF, ISNI, LCSH, FAST)

Share-Catalogue tenant

Share-Catalogue

Share-Music tenant

Share-Art tenant

Share-VDE tenant
MARC records converted in linked data by SVDE are delivered to Sinopia cataloguing module

In LD4P3: a two-way flow Sinopia-SVDE will be put in place

Next steps: work together to optimize interaction
Conversion and housing of PCC data in SVDE

Several models for including PCC data in SVDE are under analysis

Among the possible scenarios: PCC as autonomous tenant with specific PCC URIs and enrichment from other sources (URIs from SVDE, LC, GNF, VIAF, Wikidata etc.)
Wikidata

Wikidata is increasingly authoritative and is used in the library community as a source for entity identification.

Query the source and enrich SVDE data with Wikidata entities information.

Ad hoc SVDE working group is studying the use cases for interaction (e.g. starting points for the analysis are API:Main page + Wikibase/API, and other documentation).

Major challenge: alignment between Wikidata and SVDE entities.
Share-VDE approach
Share-VDE pillars

- Integration
- Autonomy
- Community engagement
- Shared vision
Integration
Autonomy

SVDE localisation for the University of Pennsylvania

THE KUBIKAT-LOD PROJECT

The Kubikat-LOD project is a collaborative venture to unite and connect the resources of the Kubikat union catalogue in a discovery platform based on the BIBFRAME Linked Data model.

The aim of this initiative is to offer to users of the catalogue - scholars, researchers, students - interoperability, visibility and discoverability for all types of resources, providing a single, shared point of access to the catalogues of the participating institutions through a rich search environment in which bibliographic data is displayed in a structured and comprehensible way. One of the key elements of the project is the identification and reconciliation of entities, which allows the data to be enriched with information from authoritative sources, and form progressively connections among library, museum and archive domains. The catalogue is, for example, enhanced by the Gemeinsame Normdatei (GND) and its data is enriched through integration with numerous external sources.

The current prototype contains bibliographic data held by the Kubikat member libraries updated to February 15th 2019.
Community engagement
Shared vision

IFLA-LRM

- **Work**
  - **Expression**
  - **Manifestation**
    - **Item**
    - **Item**
  - is realized through
  - is embodied in
  - is exemplified by

BIBFRAME

- **Hub**
  - **Work**
    - **Instance**
      - **Item**
      - **Item**
    - bf:hasExpression
    - bf:expressionOf
    - bf:hasInstance
    - bf:instanceOf

Share-VDE

- **Opus**
  - **Work**
    - **Instance**
      - **Item**
      - **Item**
    - bf:hasExpression
    - bf:expressionOf
    - bf:hasItem
    - bf:ItemOf
A tool for interconnection: J.Cricket
Thank you!

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