The Share Family Technology
concrete benefits to increase discovery experience
and linked data curation in the art domain

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Smithsonian
Libraries and Archives
Topics

• Data types and models
  ○ Smithsonian Libraries and Archives data
• Data transformation journey
• Entity curation and management
• Entity discovery portal
First things first
BIBFRAME data model
Extension to BIBFRAME

Last update 2019-11-20:
SVDE Ontology

<!-- https://svde.org/ontology -->

<Ontology rdf:about="https://svde.org/ontology/">
  <versionIRI rdf:resource="https://svde.org/ontology/svde-1-0-0"/>
  <imports rdf:resource="https://id.loc.gov/ontologies/bibframe.rdf"/>
  <cc:license rdf:resource="https://creativecommons.org/publicdomain/zero/1.0/">
    <terms:publisher rdf:resource="http://id.loc.gov/vocabulary/organizations/itfic"/>
    <skos:comment rdf:datatype="http://www.w3.org/2000/01/rdf-schema#Literal">
      Share-VDE (SVDE) 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.</skos:comment>
  </cc:license>
</Ontology>
Relationship of Work/Opus entity

<!-- https://svde.org/ontology/Work -->

<Class rdf:about="https://svde.org/ontology/Work">
    <rdfs:subClassOf rdf:resource="http://id.loc.gov/ontologies/bibframe/Work"/>
    <rdfs:label>Work</rdfs:label>
    <skos:definition>The svde:Work is defined by a constellation of elements representing the specific intellectual or artistic form that an Opus takes each time it is "realised." Individuals of the class svde:Work hold an Opus entity identity.</skos:definition>
    <svde:closeMatch rdf:resource="http://iflastandards.info/ns/lrm/lrmer/E3"/>
    <svde:closeMatch rdf:resource="http://rdaregistry.info/Elements/c/C10006"/>
</Class>
Smithsonian collections
Smithsonian Libraries & Archives

• Library Linked open data efforts
  ○ BIBFRAME in Share-VDE
    https://blog.library.si.edu/blog/tag/bibframe/
  ○ Authority_identity data in Wikidata/Wikibase
    https://blog.library.si.edu/blog/tag/wikidata-series/
SLA catalog data and linked data effort

- Enhance AACR2 to RDA records
- Embed URIs in name and LCSH headings
- Convert LCSH to FAST Headings
- Embed URIs for <relator> codes
  (e.g., author, illustrator, photographer, voice actor, woodcutter, etc.)
Avail collections through digital solutions for the increase and diffusion of knowledge among men.
The Share Family is a global community built on collaborations. Brings together cultural heritage institutions, consortia, and Library Service Platforms (LSP). Joins their knowledge in an ever-widening network of interconnected bibliographic data.

For more, please visit the Share Family and the Share-VDE wiki sites.
Data transformation
Becoming Linked open data

**Processes**

**Data Input from Institutions**
- MARC21 bib. and holding
- MARC21 aut.
- UNIMARC
- RDF/BIBFRAME
- Other formats (e.g. IIIF Manifest)

**LOD Platform Services**
- Mapping
- URI Enrichment
- Reconciliation
- Creation of Linked Data Entities
- Conversion to RDF/BIBFRAME

**Results**
- Data Publication
- Data Distribution
- Shared Data Management
- Additional Services
Cluster: the Prism

Stanford
- title: Alice in wonderland
- titleAlternative: Alice’s adventures under ground
- author: https://svde.org/people/201

National Library of Norway
- title: Alice’s adventures under ground
- titleAlternative: Journeys in Wonderland
- author: https://svde.org/people/201

(links)
- sameAs: http://dbpedia.org/resource/Alice%27s%20Adventures%20in%20Wonderland
  - Dbpedia
- sameAs: https://www.wikidata.org/wiki/Q189875
  - Wikidata
- sameAs: https://data.bnf.fr/ark:/12148/cb358500385
  - bnf

Slide courtesy of SVDE Team
Data flows from libraries, institutions and third-party authority sources (e.g. VIAF, ISNI, FAST)

The SVDE knowledge base (Sapientia) of integrated/clustered/enriched entities.

Data edited through JCricket, the entity editor.

External Connectors Architecture

Slide courtesy of SVDE Team
Entity curation and management
Connecting to JCricket Editor from Discovery Portal
Search for people, original works and publications

e.g. Jules Verne or Around the world in 80 days

https://smithsonian.svde.org

Explore the library's linked open data entities created in BIBFRAME by Share-VDE
Catalog data as linked data
graph data view

Mary Vaux Walcott

artist files at spouse occupation country of citizenship notable work instance of described by source family name

painter artist botanist scientific illustrator botanical illustrator

Smithsonian Libraries and Archives

w.wiki/6yhq
Connect to external resources

art.wikidata.link/browse?P170=Q6780882
zone47.com/crotos/?s=mary+vaux+walcott
Smithsonian Image Credits

Castle 298
si.edu/sites/default/files/styles/main_image/public/page_banner/castle-298.jpg

commons.wikimedia.org/entity/M33579

The Hope Diamond
Photo courtesy of the Smithsonian Institution
www.si.edu/newsdesk/photos/hope-diamond-0

Dorothy’s Ruby Slippers
americanhistory.si.edu/press/fact-sheets/ruby-slippers

Mei Xiang (Meghan Murphy photos)
insider.si.edu/mei-xiang-2/

1909 Wright Military Flyer
airandspace.si.edu/collection-objects/1909-wright-military-flyer/nasm_A19120001000

Natural History Stacks
blog.library.si.edu/wp-content/uploads/2013/03/SIL_2012_01_NatHist_prelimEdits_DSC_4202.jpg

Smithsonian Institution Building (aka the Castle)
commons.wikimedia.org/entity/M96312914
Resources

• BIBFRAME
  https://bibframe.org/

• Share Family web site
  https://share-family.org/

• Smithsonian LOD discovery portal
  https://smithsonian.svde.org/

• BIBFRAME Workshop Europe 2023
  *(free: in person and online)*
  Join us at the **KBR Royal Library of Belgium**, Brussels, Belgium
  https://bfwe.eu
Thank you!

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