



Fostering BIBFRAME collaboration: interoperability and data curation with the Share Family

Library of Congress July 2024 BIBFRAME Update Forum
Monday, July 1, 2024

<https://www.share-family.org/>
<https://wiki.svde.org>
info@svde.org

Abstract

Share-VDE was the first system to make a major commitment to BIBFRAME and has been active with BIBFRAME since 2016. The several Share Family projects all maintain standardization of BIBFRAME linked data as defined by the Library of Congress and the presentation will emphasize how standard BIBFRAME is a key to our community's integrated environments as systems proliferate, from both the interoperability and the data curation point of view.

Share Family background



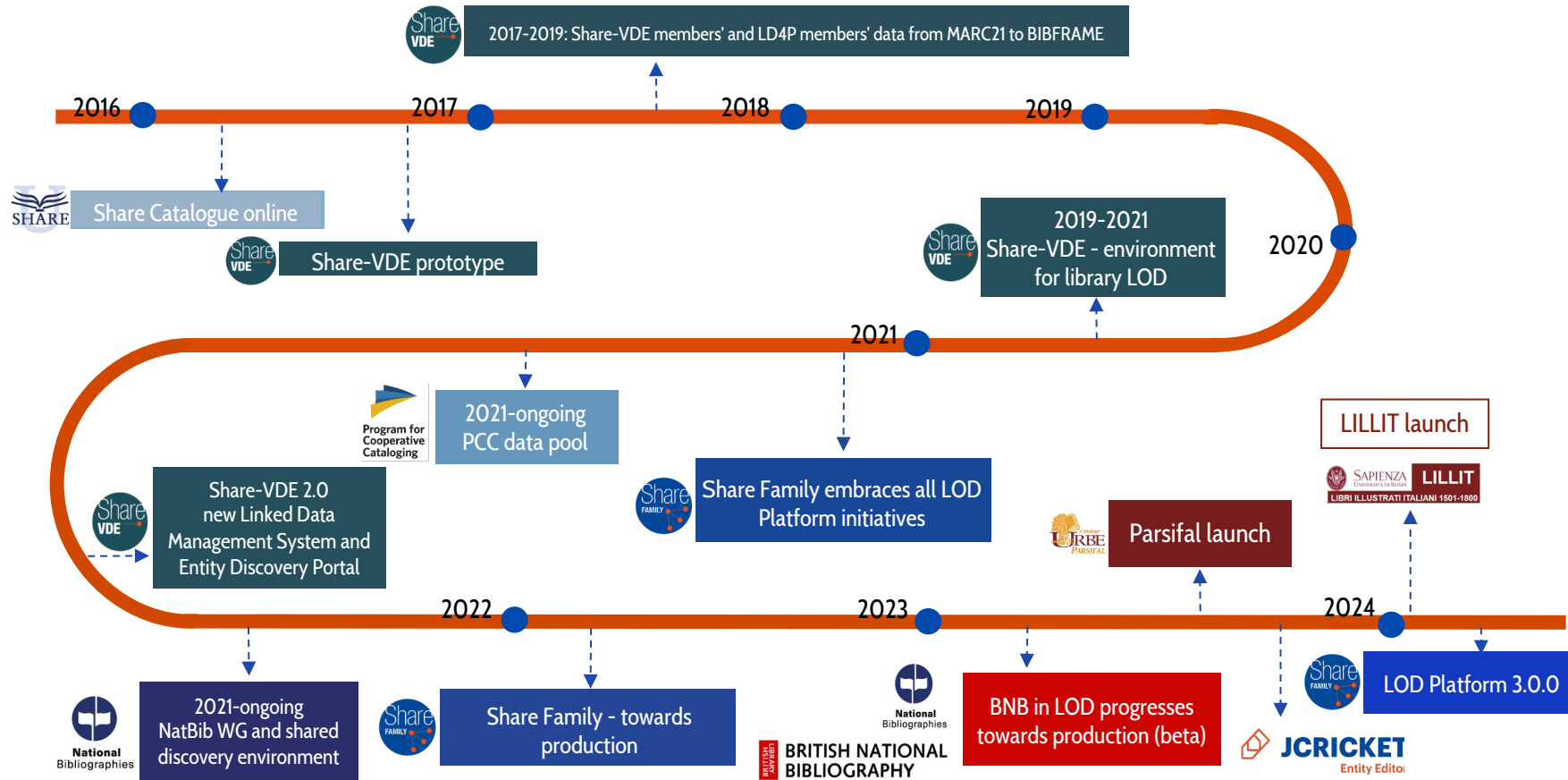
The Share Family Linked Data Ecosystem



The Share Family is a global community built on collaboration that brings together libraries, archives, museums, consortia and Library Service Platforms (LSPs) to join their knowledge in an ever-widening network of interconnected bibliographic data.

For further details please refer to <https://www.share-family.org> and [the dedicated Share-VDE wiki section.](#)

Stepping stones



Share Family processes and output

DATA INPUT FROM INSTITUTIONS

MARC21 bib. and holding

MARC21 aut.

UNIMARC

RDF/BIBFRAME

Other formats (eg. FOLIO)

LOD PLATFORM SERVICES

Mapping

URI Enrichment

Reconciliation

*Creation of
Linked Data Entities*

*Conversion to
RDF-based BIBFRAME*

=

RESULTS

[Data Publication]

- End user discovery portals for each initiative of the Share Family
- Search APIs for data consumption (GraphQL, REST, SPARQL)

+

[Data Distribution]

- API / protocols for third parties integration (eg. local LSPs and data editor such as Wikidata, Sinopia BIBFRAME editor, FOLIO etc.)
- Downloadable datasets (BIBFRAME/RDF, MARC enriched records)

+

[Shared Data Management]

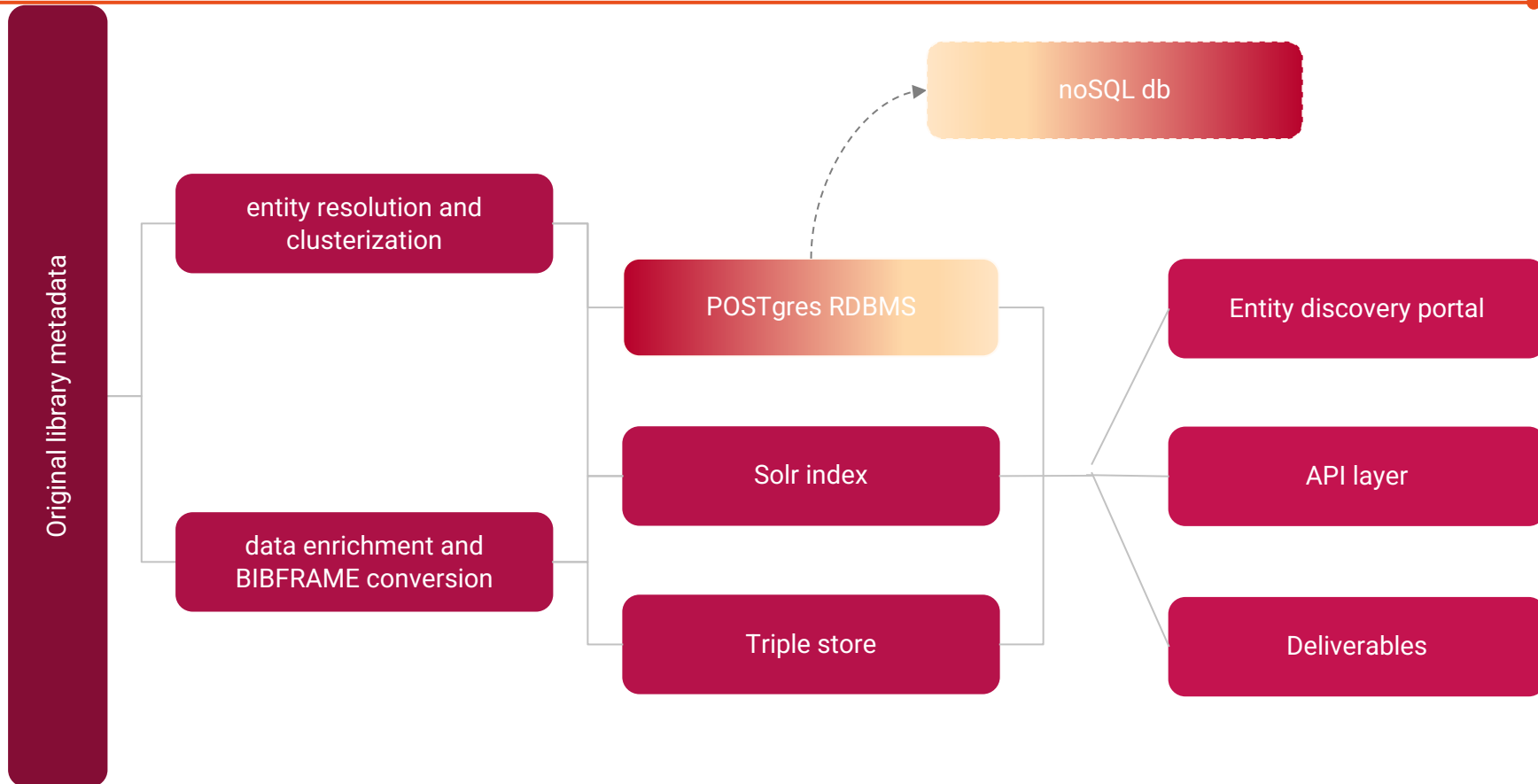
- Editing of Share Family entities with JCricket
- Reuse of Share Family BIBFRAME data in local library systems
- Reuse of Share Family MARC representations in local library systems

+

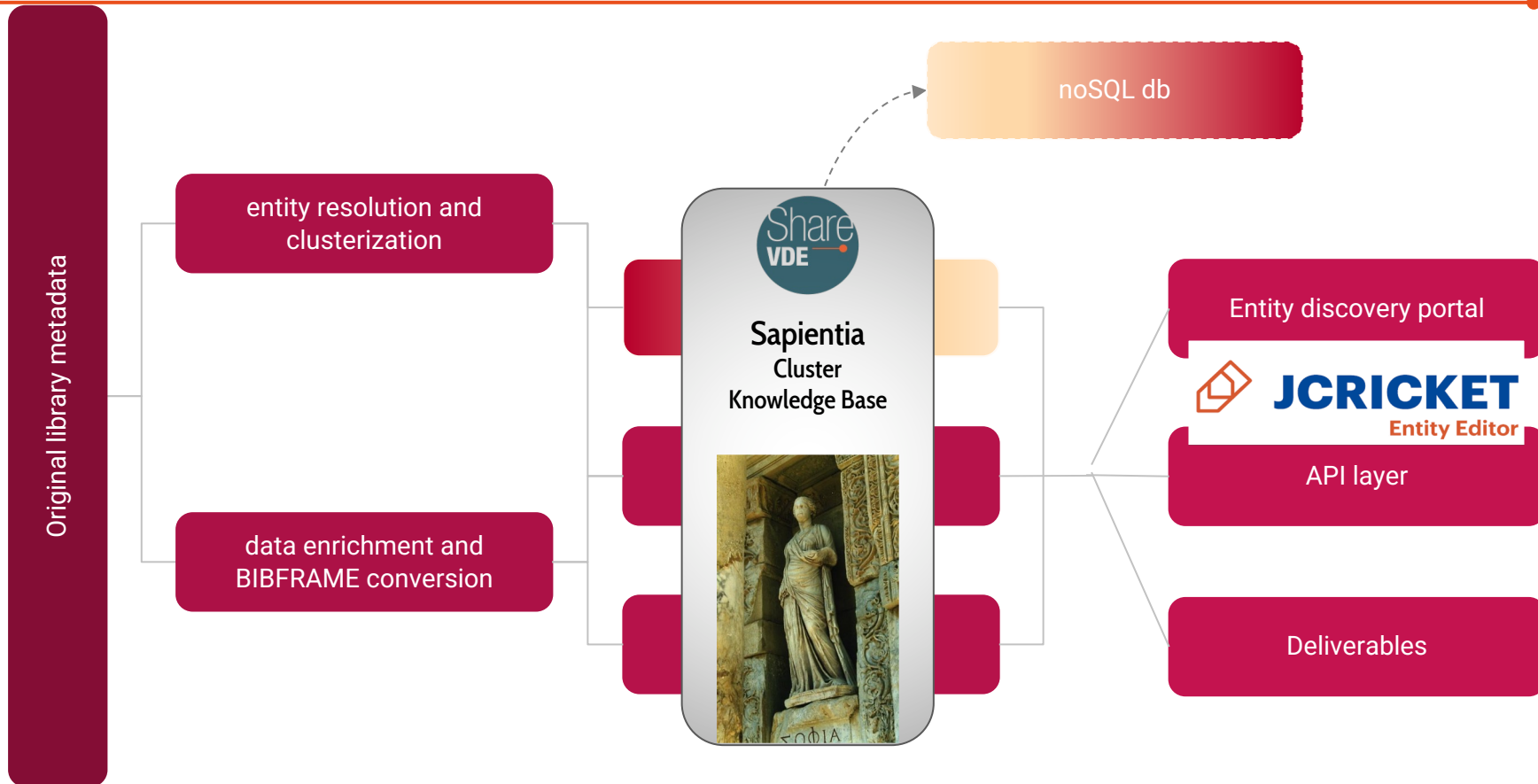
[Additional Services]

- Authority control in MARC and BIBFRAME-based workflows
- SFI - Share Family Index: registry of entity URIs

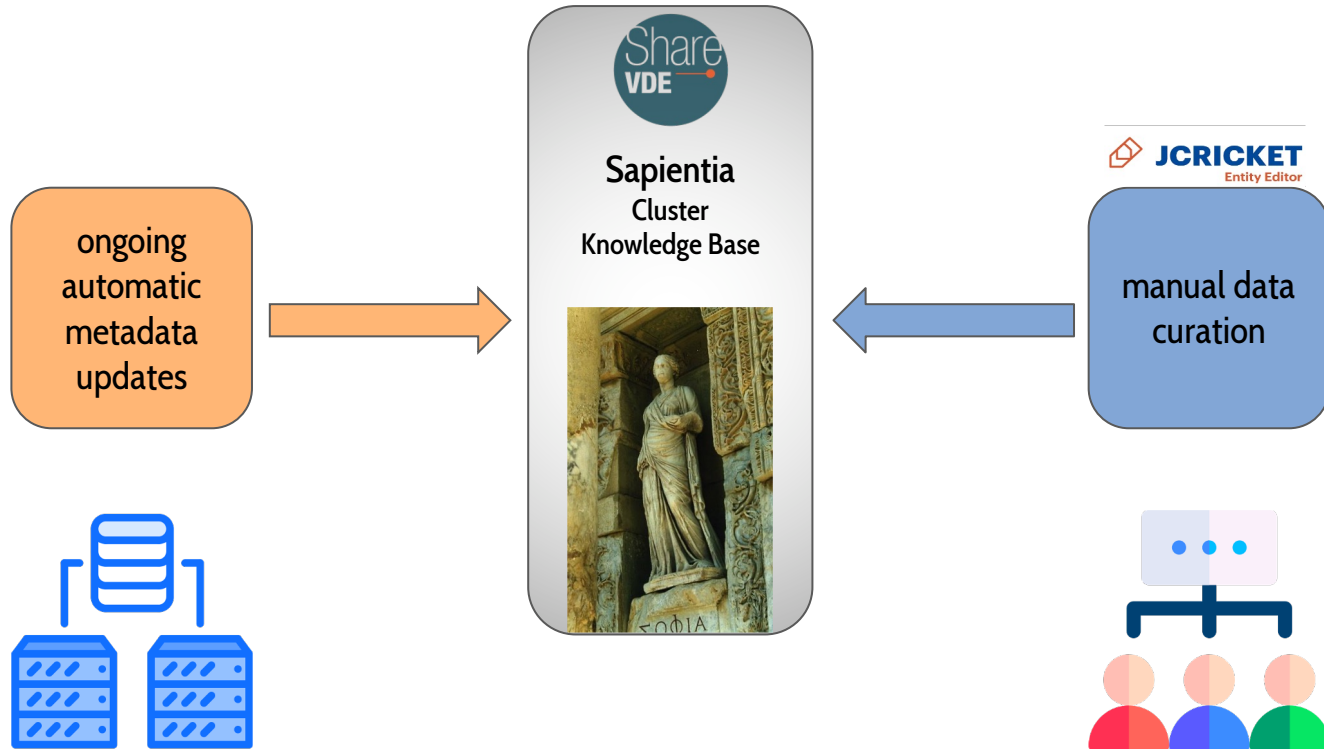
Metadata management and output



Metadata management and output




The data lake as a source of living data



Entity discovery portal as an point of access for data curation

ShareVDE BETA

← rowling search Search all content... Options



Person

Rowling, J. K.

British author and philanthropist (born 1965). Born in Yate.

Joanne Rowling, known by her pen name J. K. Rowling, is a British author and philanthropist. She wrote Harry Potter, a seven-volume fantasy series published from 1997 to 2007. The series has sold over 600 million copies, been translated into 84 languages, and spawned a global media franchise including films and video games. The Casual Vacancy (2012) was her first novel for adults. She writes Cormoran Strike, an ongoing crime fiction series, under the alias Robert Galbraith. – Wikipedia

More options

Wikimedia Commons

Original works by Original works about

Filter original works... Year

5 results

No.	Title	Year	Genre	Creators
1	Harry Potter and the philosopher's stone	1999	Fantasy fiction	Rowling, J. K. (author)
2	Harry Potter and Chamber of Secrets	1998	Fantasy fiction	Rowling, J. K. (author)
3	Harry Potter and the goblet of fire	2000	Fantasy fiction	Rowling, J. K. (author)
4	Harry Potter and the prisoner of Azkaban	1999	Fantasy fiction	Rowling, J. K. (author)
5	The tales of Beedle the Bard	2008	Fantasy fiction	Rowling, J. K. (illustrator)

End of list

Rowling, J. K.
with works by her, publications,
works about her

The editor: collaboratively manage entity metadata

ShareVDE BETA

Lewis Carroll

All results (6) People and organizations (1) Original works (5)

6 results found

- Person
Lewis Carroll
English writer, logician, Anglican deacon and photographer (1832-1898). Born in Daresbury, Lancashire, England.
- Original work
Alice's adventures in Wonderland
Novel written by [Lewis Carroll](#) in 1865.
- Original work
Music in art
Journal published by [Lewis Carroll](#), [Alfred Ludlow Carroll](#), and [Charles Lutwidge Dodgson](#).

Step 1: Search on Share-VDE Main Portal

Step 2: Enter the entity details page

ShareVDE BETA Dashboard Explore Lewis Carroll Simple search lewis carroll Advanced search Editor Lewis Carroll Options

UND, ENG, +

Overview

Lewis Carroll

Basic info

- Agent type
- Name
- Birth year
- Death year
- Birth place
- Death place

Other

- Alternative names
- Notes
- Occupation
- First name
- Last name

[Add property](#)

Metadata External IDs Logs

Basic info

Agent type

Undefined

Person (<http://uat3-base-svde.atcult.it/agentTypes/Person/>)

Name

Undefined

Carroll, Lewis

English

Undefined

Birth year

Step 3: Click on the edit action and enter the JCricket UI



Wikimedia Commons

Editor Options

[Edit](#) CTRL+ALT+T

[Add to my merge list](#) ALT+SHIFT+M

Copy URI for this page

<https://svde.org/agents/201> Copy

Download the page in these formats

- json

More information related to this person on other websites

- [wikidata record](#)
- [isni record](#)
- [viaf record](#)



JCricket for living data curation

The screenshot displays the ShareVDE Editor interface with three panels open for editing metadata. The top navigation bar includes 'ShareVDE BETA', 'Dashboard', 'Explore', 'Simple search', 'Advanced search', 'Editor', and 'Options'. The right side of the editor shows 'Editor layout' and 'UND, ENG, +'.

Panel 1: "Patria of Myrina" (local histories)

- Metadata:** External IDs, Logs
- Basic info:** URI (<https://svde.org/opuses/1719600190753>)
- Opus type:** Language (LanguageOpus)
- Title:** Patria of Myrina
- Language:** English (ENG)
- Year:** [Empty]
- Genre:** Local histories
- Contributor:** Agathias (Author (AUT))
- Other:** Work (<https://svde.org/works/1719600190768>)

Panel 2: <https://svde.org/works/1719600190768>

- Metadata:** External IDs, Logs
- Basic info:** URI (<https://svde.org/works/1719600190768>)
- Instance:** "La patria di Myrina" (2003 edition) (<https://svde.org/instances/1719600190780>)
- Language:** Italian (<https://svde.org/languages/ita>)
- Year:** 1968
- Contributor:** Johannes Scylitza (Translator (TRL))
- Other:** Add property

Panel 3: "La patria di Myrina" (2003 edition)

- Metadata:** External IDs, Logs
- Basic info:** URI (<https://svde.org/instances/1719600190780>)
- Title:** La patria di Myrina
- Language:** English (ENG)
- Year of publication:** 2003
- Contributor:** Ciufferi, Caterina (Illustrator (ILL)), Zanicelli (Publisher (PBL))
- Other:** Place of publication: Bologna (<https://svde.org/places/3181928>)
- Other:** Add property

2016-2024 Lesson learned



JCRICKET for living data curation – Usability

Entity Editor

Overview

- “Harry Potter and the Philosopher’s stone” (1999 edition)

Basic info

- URI
- Title
- Year of publication
- Contributor

Other

- Item
- ISBN
- Carrier type
- Place of publication
- Auction/exhibition
- + Add property

“Harry Potter and the Philosopher’s stone” (1999 edition)

Metadata External IDs Logs

Basic info

URI

https://svde.org/instances/I0050

Title

- Harry Potter and the Philosopher’s stone
- Harry Potter and the philosopher’s stone

Year of publication

1999

Contributor

Buena Vista Home Entertainment (https://svde.org/agents/112)

Other

Item

- Copy no. i660 (https://svde.org/items/660)
- Copy no. i561 (https://svde.org/items/561)

ISBN

0590353403

Provision Activity

- Contributor (publisher)
- Place of publication
- Year of publication

Buena Vista Home Entertainment : Burbank, 1999

The Cluster Knowledge Base – Depth granularization

Es. record NLF id 017484714

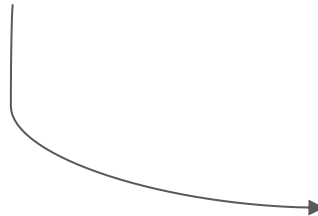
[...]

```
<datafield tag="502" ind1=" " ind2=" ">  
<subfield code="a">Väitöskirja :</subfield>  
<subfield code="c">Aalto-yliopisto, teknillisen fysiikan laitos,</subfield>  
<subfield code="d">2020.</subfield>  
<subfield code="9">FENNI&lt;KEEP&gt;</subfield>  
</datafield>
```

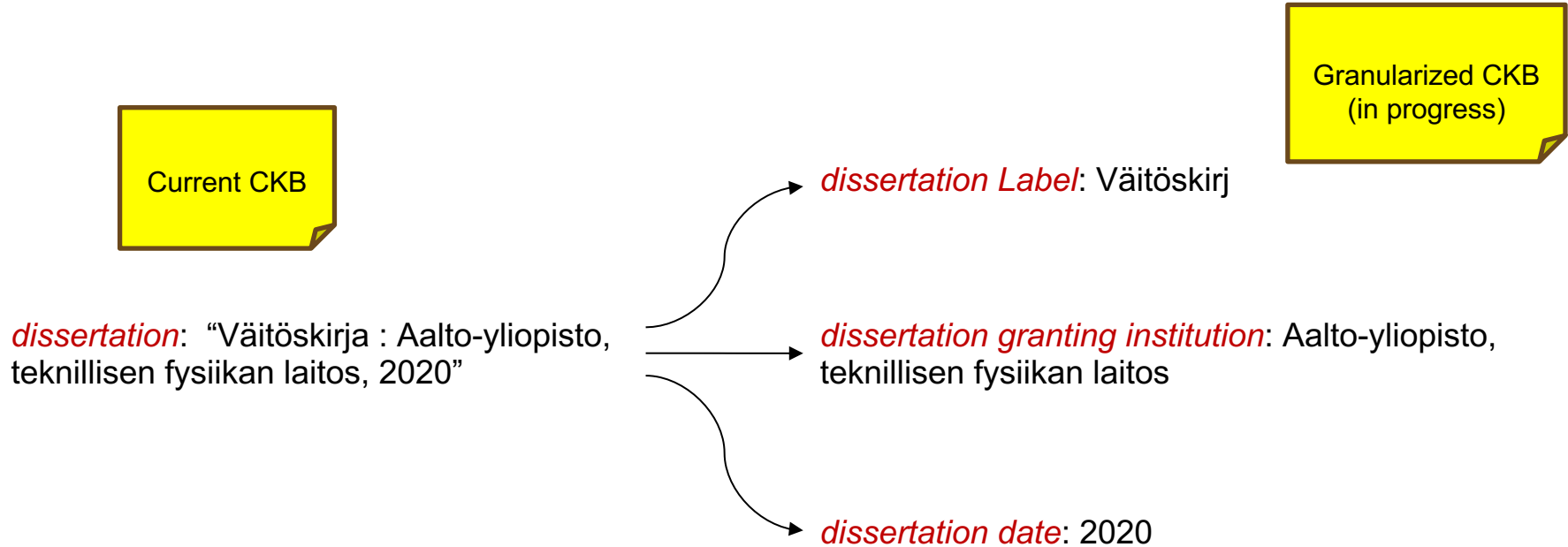
[...]

LC BIBFRAME ConvSpecs (with Share extension)

502 - DISSERTATION NOTE (R)	Opus - dissertation - Dissertation
Subfield Codes	
\$a - Dissertation note (NR)	## - rdfs:label
\$b - Degree type (NR)	## - degree - literal
\$c - Name of granting institution (NR)	## - grantingInstitution - Agent rdfs:label
\$d - Year of degree granted (NR)	## - date - literal
[...]	[...]



The Cluster Knowledge Base – Depth granularization



The Cluster Knowledge Base – Grouping

Es. record NLF id 010468136

[...]

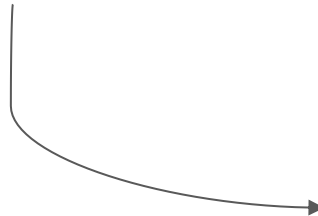
```
<datafield tag="264" ind1=" " ind2="1">  
  <subfield code="a">Sofiâ :</subfield>  
  <subfield code="b">Nauka i izkustvo ;</subfield>  
  <subfield code="a">Moskva :</subfield>  
  <subfield code="b">Russkij âzyk,</subfield>  
  <subfield code="c">1980.</subfield>
```

```
</datafield>
```

[...]

LC BIBFRAME ConvSpecs

264 - PRODUCTION, PUBLICATION, DISTRIBUTION, MANUFACTURE, AND COPYRIGHT NOTICE (R)	I - provisionActivity
Subfield Codes	
\$a - Place of production, publication, distribution, manufacture (R)	## - bflc:simplePlace
\$b - Name of producer, publisher, distributor, manufacturer (R)	## - bflc:simpleAgent
\$c - Date of production, publication, distribution, manufacture, or copyright notice (R)	## - bflc:simpleDate (not datatyped)
[...]	[...]
Subfield Codes	I - provisionActivity



The Cluster Knowledge Base – Grouping

<i>publication year</i>	1980
<i>publisher place</i>	Sofiâ
<i>publisher place</i>	Moskva
<i>publisher name</i>	Nauka i izkustvo
<i>publisher name</i>	Russkij âzyk

Current CKB

Provision Activity 1

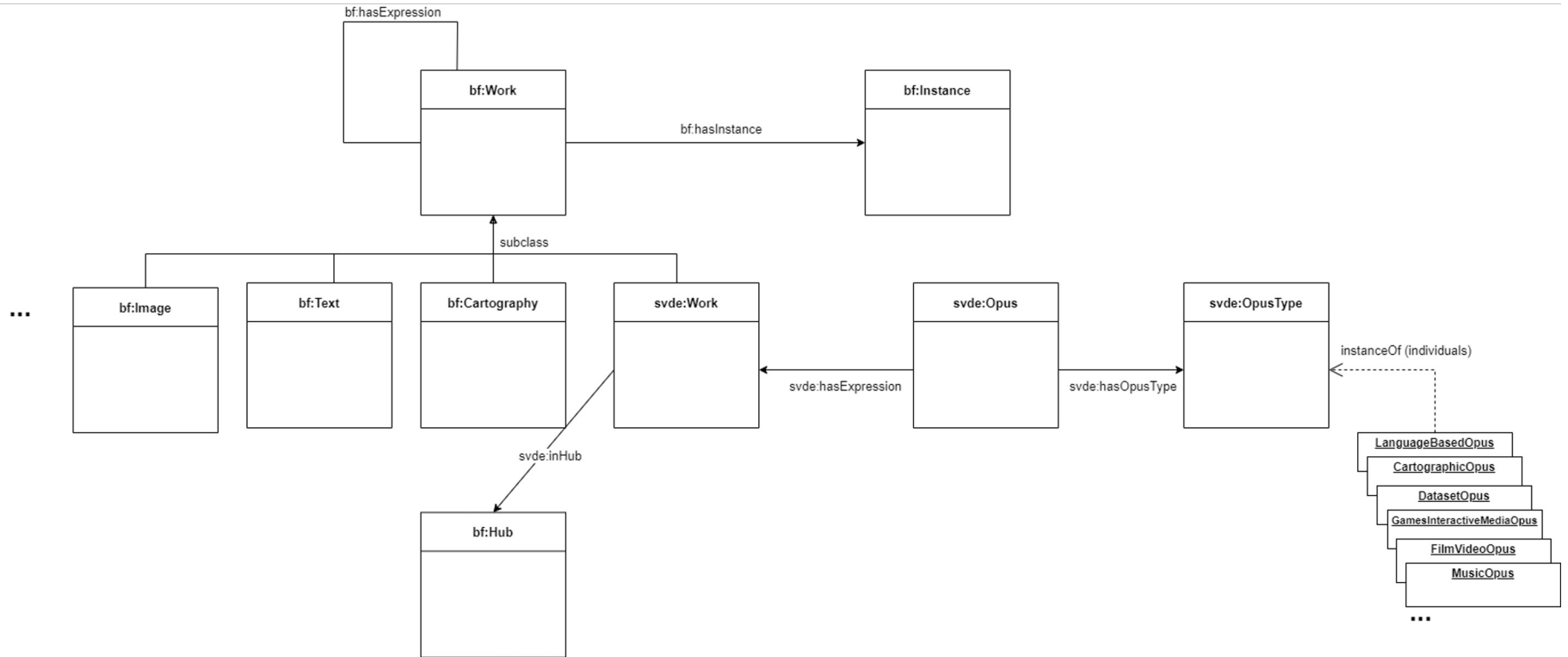
<i>publisher place</i>	Sofiâ
<i>publisher name</i>	Nauka i izkustvo
<i>publication year</i>	1980

Provision Activity 2

<i>publisher place</i>	Moskva
<i>publisher name</i>	Russkij âzyk
<i>publication year</i>	1980

Granularized CKB
(in progress)

Share-VDE Ontology – The challenge of interoperability

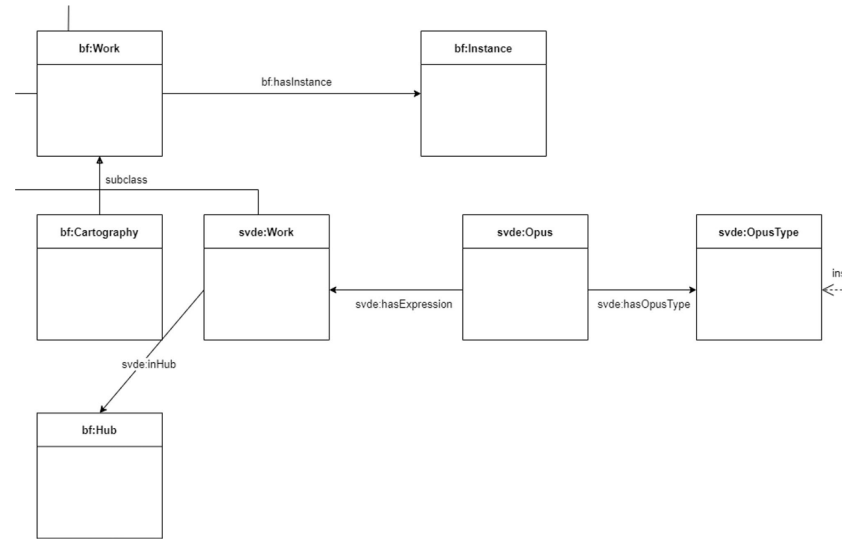


Share-VDE Ontology – The challenge of interoperability

SVDE Ontology designed in the dedicated Sapiientia Entity Identification Working Group as an extension of BIBFRAME.

Core model:

- **svde:Work**
- **svde:Opus**
- **svde:hasExpression**
- **svde:hasOpusType**
- **svde:inHub**



preliminary version

<https://doi.org/10.5281/zenodo.8332350>



The inclusion of the bf:Hub to guarantee the interoperability

Progetti / Share-VDE / SVDE-9859 / SVDE-9754

[Spike] Hub entity

Allega Crea sottotask Collega ticket Aggiungi design Crea ...

Descrizione

It's needed a specific analysis to manage the entity Hub in SVDE.

See the new SVDE ontology: [opus-work-model_UpdateOpusTypes_VersioneMia.drawio](#)

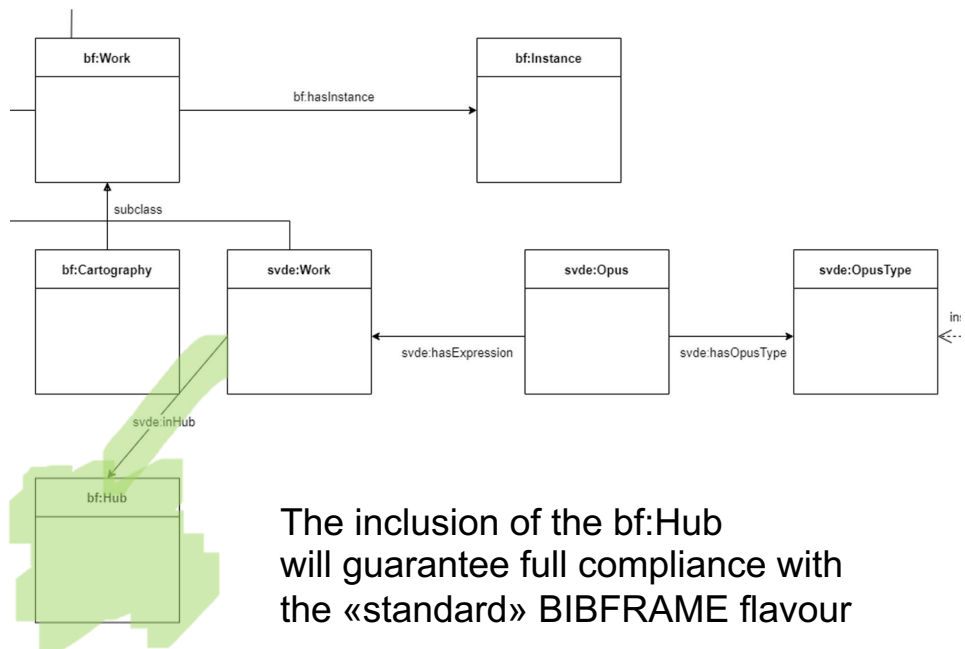
Acceptance Criteria:

- Analysis for Hub entity

Ticket collegati

relates to

<input type="checkbox"/>	SVDE-8087 [Spike] Management of Work entity for Agent relationships	COMPLETATA
<input checked="" type="checkbox"/>	SVDE-9857 Hub: management of RDBMS values	DA COMPLETARE
<input checked="" type="checkbox"/>	SVDE-9858 Hub clusterization entity from bibliographic record	DA COMPLETARE
<input checked="" type="checkbox"/>	SVDE-9863 Hub clusterization entity from LOC authority record	DA COMPLETARE
<input checked="" type="checkbox"/>	SVDE-9864 [Authify] Endpoint to get bf:Hub LOC uri	DA COMPLETARE
<input checked="" type="checkbox"/>	SVDE-9886 Endpoint query for bf:Hub uri using Icn	DA COMPLETARE
<input checked="" type="checkbox"/>	SVDE-9888 [Delta] managing bf:Hub in delta process	DA COMPLETARE
<input checked="" type="checkbox"/>	SVDE-9890 [Spike] API management for entity bf:Hub	DA COMPLETARE



Flexibility & Elasticity for Interoperability

Flexibility and elasticity are key concepts for broader participation in the Share Family initiative: collecting and responding to the needs of a large community must not mean moving away from the standard and benefits (in terms of interoperability) that a "common language" guarantees.

Differences in punctuation (Share standard tool vs LC marc2bibframe tool)

```
<marc:datafield tag="264" ind1=" " ind2="1">
  <marc:subfield code="a">Napoli :</marc:subfield>
  <marc:subfield code="b">Graus edizioni,</marc:subfield>
  <marc:subfield code="c">[2022]</marc:subfield>
</marc:datafield>
```

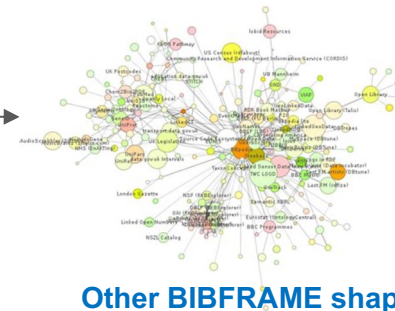
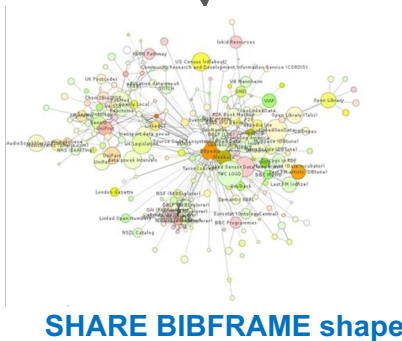
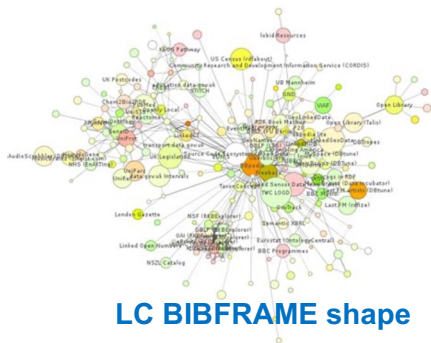
Lodify 1.2 VS marc2bibframe

1.84375 score for `_:instances/CASALINI5192190 (bf:Instance)` match with `http://example.org/5192190#Instance (bf:Instance)`

<code>---_:instances/CASALINI5192190 - bf:publicationStatement - "Napoli : Graus edizioni, [2022]"<---</code>	<code>---http://example.org/5192190#Instance - bf:publicationStatement - "Napoli: Graus edizioni, [2022]"<---</code>
<code>_:instances/CASALINI5192190 - bf:dimensions - "21 cm."</code>	<code>http://example.org/5192190#Instance - bf:dimensions - "21 cm."</code>
<code>_:instances/CASALINI5192190 - bf:extent - _:bnINPhysicalDescriptionIN300INafgINCASALINI5192190IN5</code>	<code>http://example.org/5192190#Instance - bf:extent - _:node111cd7sopx21</code>
<code>http://id.loc.gov/resources/works/22864028 - bf:hasInstance - _:instances/CASALINI5192190</code>	<code>http://example.org/5192190#Work - bf:hasInstance - http://example.org/5192190#Instance</code>

Flexibility & Elasticity for Interoperability

```
<marc:datafield tag="264" ind1=" " ind2="1">  
  <marc:subfield code="a">Napoli :</marc:subfield>  
  <marc:subfield code="b">Graus edizioni,</marc:subfield>  
  <marc:subfield code="c">[2022]</marc:subfield>  
</marc:datafield>
```



Get involved!

Becoming part of the global Share Family means sharing data and co-operating with the greater international library community



The family continues to expand as more and more libraries worldwide embrace the opportunity to be involved in an international network of information, creating dialogue, participation and partnership

Get in touch with us to find out more about how the Share family can help your library:

info@svde.org

<https://share-family.org>

<https://wiki.svde.org/>





Thank you!

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<https://wiki.svde.org/>

<https://www.share-family.org/>