

**International  
Conference**  
Bibliographic  
Control  
in the  
Digital  
Ecosystem

# The future of bibliographic services in light of new concepts of authority control

12th February 2021  
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# New era, new needs

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- Technological innovations + cataloguing changes: machines take on proactive roles in the bibliographic world.
- The cultural heritage sector is called to react to the growing need for supervisory authorities (higher risk of unreliable and perishable data).
- Authority control guarantees: homogeneity, stability and formal quality of access entries.
- The world-wide system of bibliographic control must respond to this need, more than ever, adapting its tools to the demands of the globalized world.

# Where we are and what we need

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Record → Entity : New authority control

- More flexible notion of entity identification and relationships between entities.
- Transition from FRBR to IFLA LRM.

Interoperability of data models

- Global cooperation (libraries, archives, museums, publishers, providers).
- Data structure: RDF quads and URIs.

# The *Provenance* and its supporting role

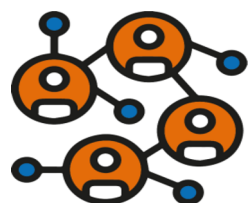
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The role of the Provenance to manage a shared environment (in building or in retrieving the authoritative data):

- in local authority: it's important for data retrieval, not for clusters building;
- in external authoritative sources: it's important for clusters building, not considered for data retrieval.

# Putting new models into practice

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**Share-VDE** is a library-driven initiative initiated in 2016 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 a structure based on the **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 Sapiientia Cluster Knowledge Base**, the common authoritative source of clusters accessible in RDF, open to the Share-VDE community and beyond.



# ... in a cooperative environment

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Share-VDE is a collaborative endeavour based on the needs of libraries, developed by:



the joint efforts 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;



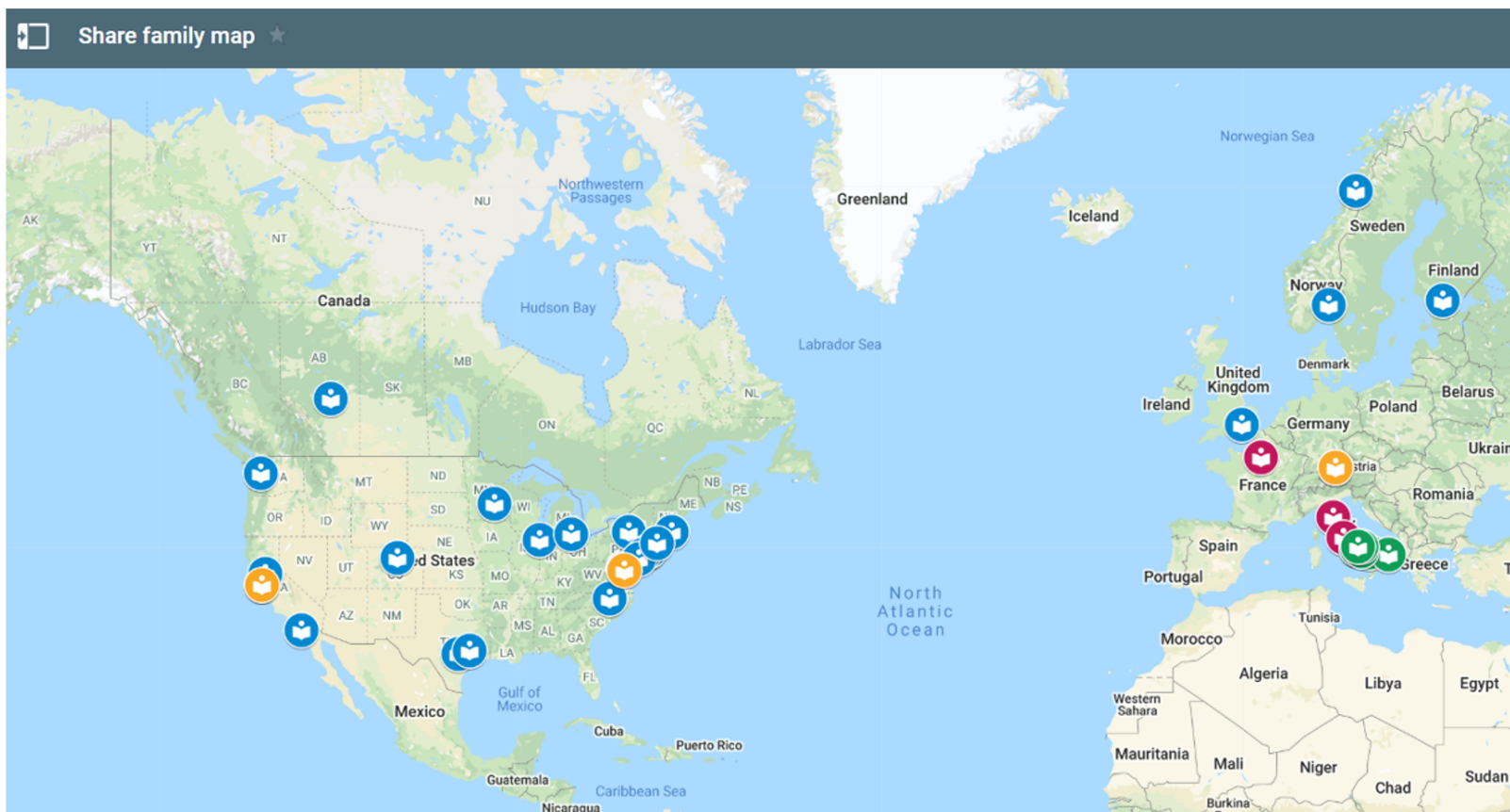
**influenced by** the vision of the **Linked Data for Production** initiative;



with input and active participation from an **international group of national and research libraries**.



# The Share family map around the world



Details can  
be found on  
[wiki.svde.org](http://wiki.svde.org)

# Share-VDE overall goals

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**Enrichment** of MARC records with identifiers from external sources (e.g. ISNI, VIAF)



**Reconciliation and clusterization** of entities and publication of the Cluster Knowledge Base

**Conversion from MARC to RDF** using the BIBFRAME vocabulary together with other ontologies

**Batch/automated authority services**, data updating and data dissemination services

Manual **entity management tool** (J.Cricket)

Data publication on an **entity oriented user interface** ([www.share-vde.org](http://www.share-vde.org))



# Share-VDE Advisory Council & Working Groups

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The Share-VDE AC takes an active role in determining future uses and vision for the Share-VDE initiative with the following aims: to develop future use cases for Share-VDE, and set development priorities as needed; to monitor and lead the work of the various Advisory Council Working Groups; to maintain communication with authorities and among the Share member institutions.

There are 4 sub-committees focusing on specific areas:

- Sapiaientia Entity Identification Working Group
- Authority/Identifier Management Services Working Group
- Cluster Knowledge Base Editor Working Group
- User experience/User Interface Working Group

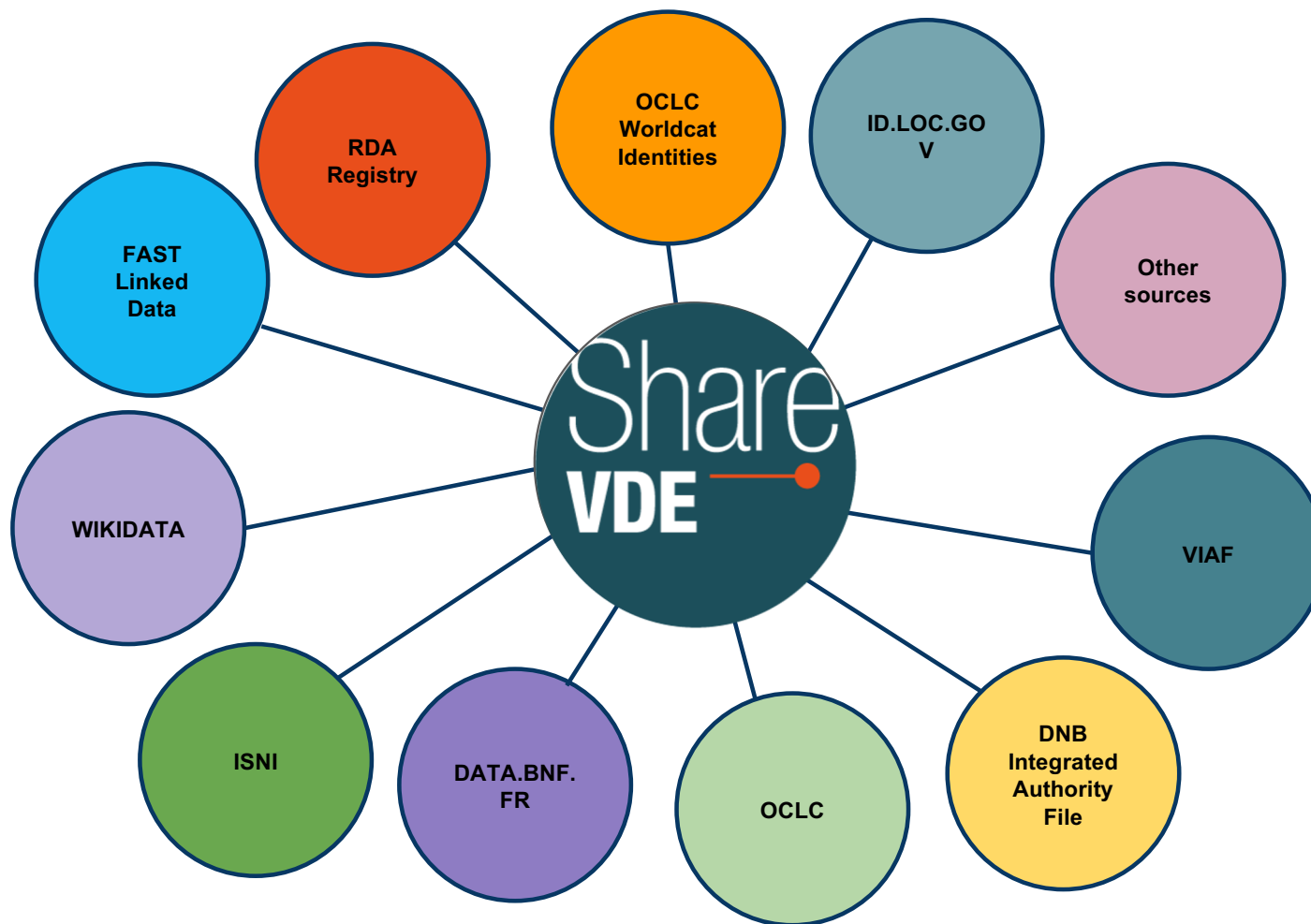
# Authority/Identifier Management Services WG

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- defines guidelines and best practices for Authority/Identifier management in the linked data environment;
- defines scope and data-flow for the creation and implementation of automated services based on preliminary documentation;
- proposes additional use cases identified as essential for effective knowledge base management.

# Some of the external sources

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# Integration - Wikidata

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Wikidata is increasingly authoritative and is used in the library community as a source for entity identification (SVDE property on Wikidata [Share-VDE author ID](#))



Query the source and enrich SVDE data with Wikidata entities information and vice versa → connection with [Casalini participation in the PCC Wikidata pilot](#)



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)

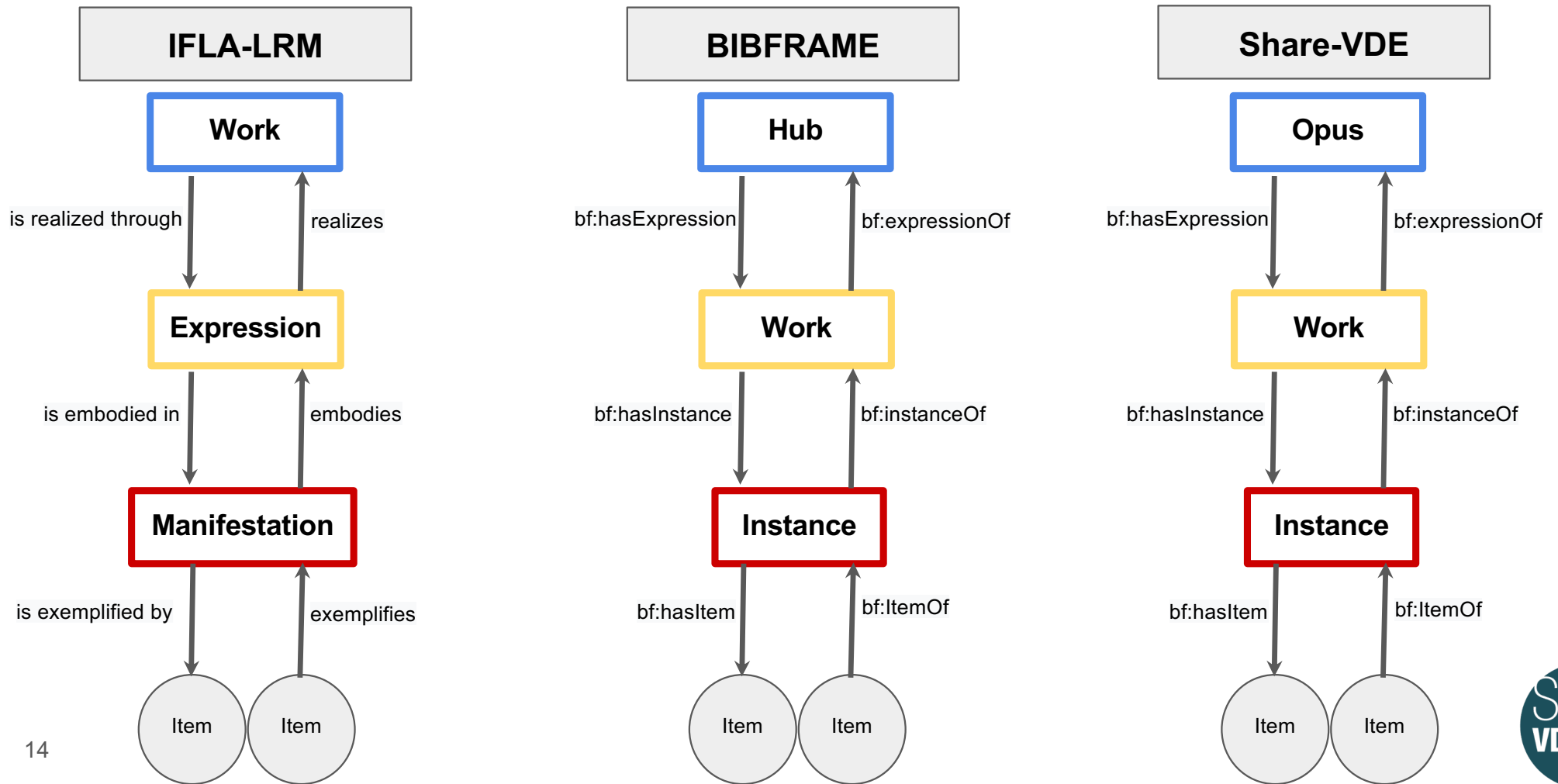


Major challenge: alignment between Wikidata and SVDE entities

# Integration - the technological perspective

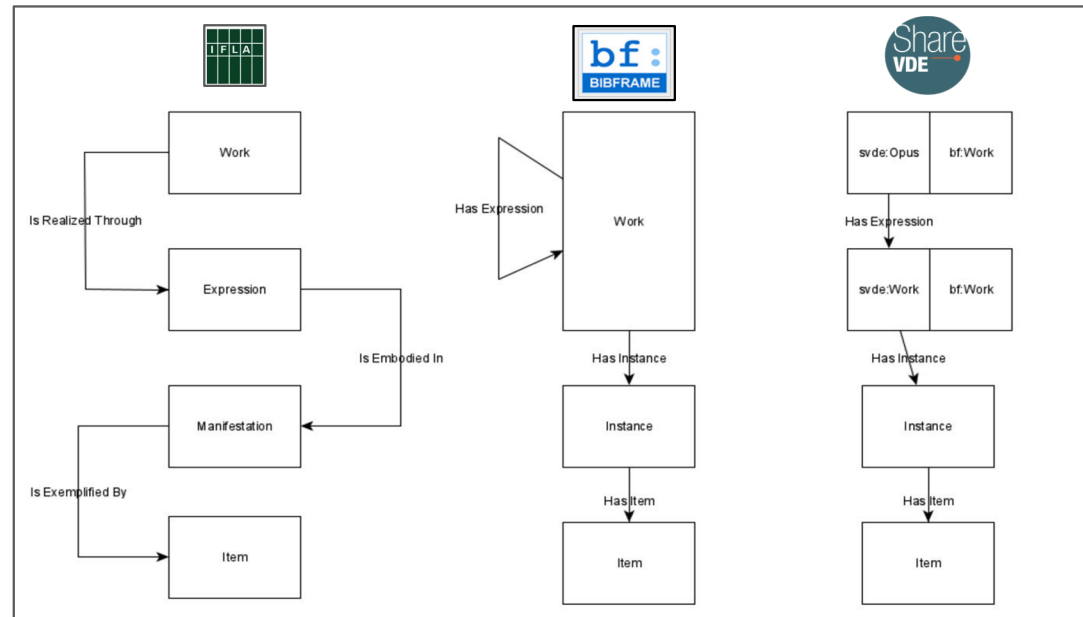


# Comparison IFLA-LRM/BIBFRAME/Share-VDE



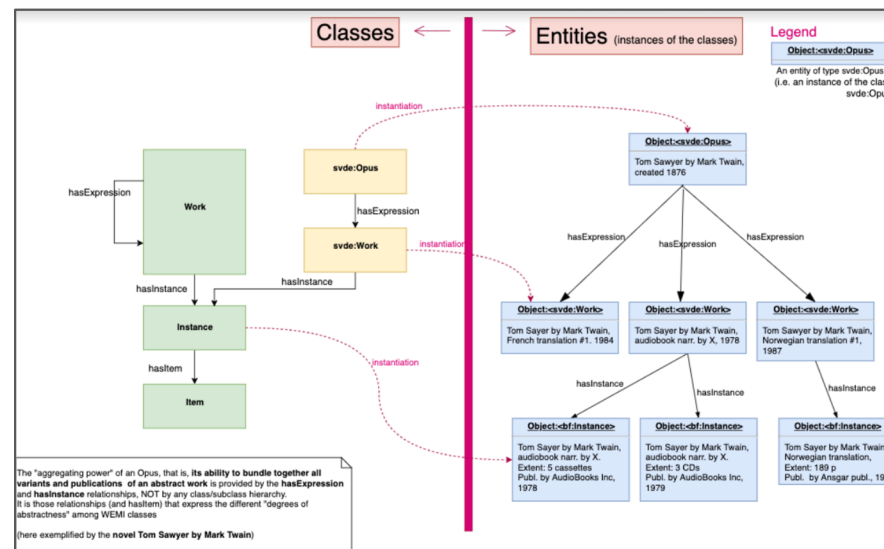
# The challenge of data models interoperability

Share-VDE Sapiientia Entity Identification (SEI) Working Group decision of June 10th 2020

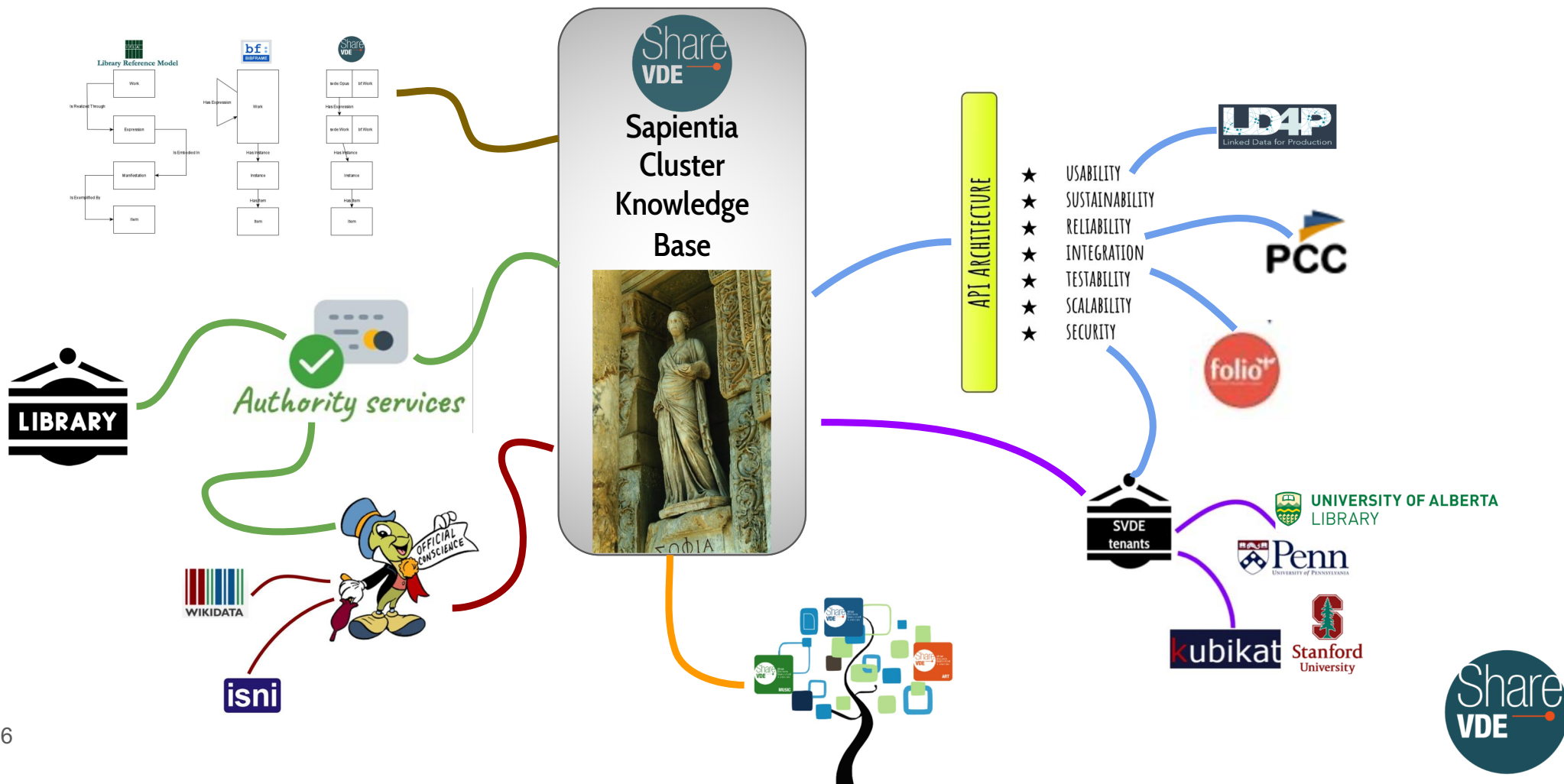


Resource that is a **svde:Opus** is also a **bf:Work**

Likewise resource that is a **svde:Work** is also a **bf:Work**



# Towards the Share-VDE Sapiientia CKB ecosystem





# Automatic authority processes

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For record environments:

- MARC record validator
- MARC corrections for errors and obsolete forms
- MARC matching/enrichment with SVDE and external profiled sources

For RDF environments:

- Access point enrichment (including Series and Subjects)
- Matching, import and interaction with the Sapiientia Cluster Knowledge Base

(Enabled through the **LOD Platform**)

# Manual authority processes

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- Manual control for similar matches and for non matches
- Entity Work and Agents (including Publisher) access point management
- Integration with the **ISNI** registration processes

(Enabled through the **URI Registration Platform**)

- Cluster Knowledge Base entity management for Works and Agents

(Enabled through the **J. Cricket CKB Editor**)

# Integration of J.Cricket: the professional perspective

The editing tool J.Cricket will allow for editing of the SVDE Cluster Knowledge Base, Sapiaientia, enabling several actions on the clusters of entities, including creation, modification, merge of clusters of works, of agents etc.

J.Cricket is going to extend authority capabilities through integration with external data sources such as Wikidata and ISNI.



SHARE-VDE  JD ➔

## 2 original works merged

1 BF work affected

**Merge summary**

Destination	Attachments	Title	Contributors	Language	Year
Destination	18	Pincher Martin	William Goulding	English	1956
	0	Pincher Martin, 1956	William Goulding	English	1956

[View destination original work](#)

View graph on external site

**This agent has been flagged for manual review**

Name

William Goulding ...

[Assign to me](#)


# How J.Cricket interacts with Wikidata

← →
Edit: "Isaiah Thomas" · Share-VDE

Share-VDE

Isaiah Thomas > Edit

Manual review needed · This cluster was automatically created and is likely in need of manual review
Verify this ×




Person

## Isaiah Thomas

Cluster metadata	Connected external IDs	Actions
Source	ID	Name
Born	Died	Confidence
OCLC	<a href="#">21X1241</a>	Isaiah Thomas
Born	1989	Manually added by Anna Doe 4 months ago (June 2nd, 2021 at 04:32PM) <a href="#">View log</a>
VIAF	<a href="#">15684Y9</a>	Isaiah Thomas
Born	1989	Automatically added on June 2nd, 2021 at 04:32PM based on identical LC authority ID in VIAF and SVDE <a href="#">Validate</a>
LC	<a href="#">89Z5663</a>	Isaiah Thomas
Born	1989	Automatically added on June 2nd, 2021 at 04:32PM based on identical LC authority ID in VIAF and SVDE <a href="#">Validate</a>
Wikidata	<a href="#">Q55322233</a>	Isaiah Thomas
Born	1773	Died 1819
Confidence	Automatically added on June 2nd, 2021 at 04:32PM based on identical LC authority ID in VIAF and SVDE <a href="#">Validate</a>	

SUGGESTION



**Isaiah Thomas** (or Isaiah Jamar Thomas)

American basketball player · Born 1989 · [Q336030](#) ★ VIAF ID match

Add this

[Add another external URI](#)



# Wikidata IDs in SVDE with J.Cricket

← → Connect external IDs · Share-VDE

Share-VDE

## Connect to external IDs

Name

OCLC VIAF **Wikidata** LC GND BNF Other...

- Isaiah Thomas** (or Isaiah Jamar Thomas)  
American basketball player · Born 1989  
Q336030 [✎](#)  
★ **VIAF ID match**
- Isaiah Thomas** (or Isaiah Thomas, Sr. · I. Thomas · I. T. · T. I.)  
Massachusetts printer, publisher and journalist · 1749-1831  
Q15503493 [✎](#)  
✔ **Birth place match**
- Isaiah Thomas** (or Isaiah Thomas, Jun. · I. Thomas, Jun.)  
(1773-1819) · 1773-1819  
Q55322333 [✎](#)  
**Connected**

+ Create new wikidata item for "John Doe" [✎](#)

Wikidata item **Q336030**

**Isaiah Thomas**  
American basketball player  
1954-2017

Sex or gender  
Male

Country of citizenship  
United States of America

Country for sport  
United States of America

Birth name  
Isaiah Jamar Thomas (English)

Date of birth  
7 February 1989

Place of birth  
Tacoma

Occupation  
Basketball player

Position played on team / speciality  
Point guard

**Connect to this ID**

**Done**



# From linked data publication to linked data editing

SHARE-VDE

Person

## William Goulding

British novelist, poet, playwright and Nobel Prize for Literature laureate

Sir William Gerald Goulding, CBE (19 September 1911 – 19 June 1993) was a British novelist, playwright, and poet. Best known for his debut novel *Lord of the Flies* (1954), he would go on to publish another eleven novels in his lifetime. In 1980, he was awarded the Booker Prize for *Rites of Passage*, the first novel in what became his sea trilogy, *To the Ends of ...* — [Wikipedia](#)

More options ▾

**Original works by** Original works about Related people

Filter... Location Language All filters

Publication title	Contributors	Language	Year
<input type="checkbox"/> Lord of the Flies	William Goulding	English	1954
<input checked="" type="checkbox"/> Pincher Martin, 1956 novel.	William Goulding	English	1956
<input checked="" type="checkbox"/> Pincher Martin	William Goulding	English	1956

↕ End of list

2 original works selected View selected ^ Deselect all Add relationship Merge

J.Cricket's purpose is to manage authority services for libraries, by providing automatic and manual data quality control procedures (APIs for automatic flows and an ad hoc web user interface for manual interaction are being designed). This means that J.Cricket purpose is twofold: the creation and handling of linked data entities within SVDE, and the direct interaction with library systems both in MARC and in RDF formats. The authority capabilities will be extended through integration with external data sources with the ability to mutually enrich both SVDE data and, for example, the Wikidata and ISNI platforms.



# Linked data for the future

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- Create connections across the LAM domain in order to preserve and promote existing knowledge while forwarding progress.
- Collaborative programs and initiatives through the players of the information chain are crucial to implementation for cultural heritage collections.
- Bibliographic agencies must strive to provide constantly updated and authoritative information as well as promoting an open and cooperative approach to authority control steered by the library community.

# Thank you

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