

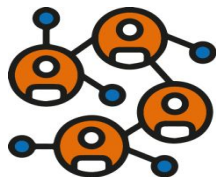


# Share-VDE 2.0: a panel discussion among the Share-VDE working group chairs

Beth Picknally Camden, Filip Jakobsen, Ian Bigelow, Jim Hahn, Martin Knott, Erik Radio

# Share-VDE Overview

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**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.

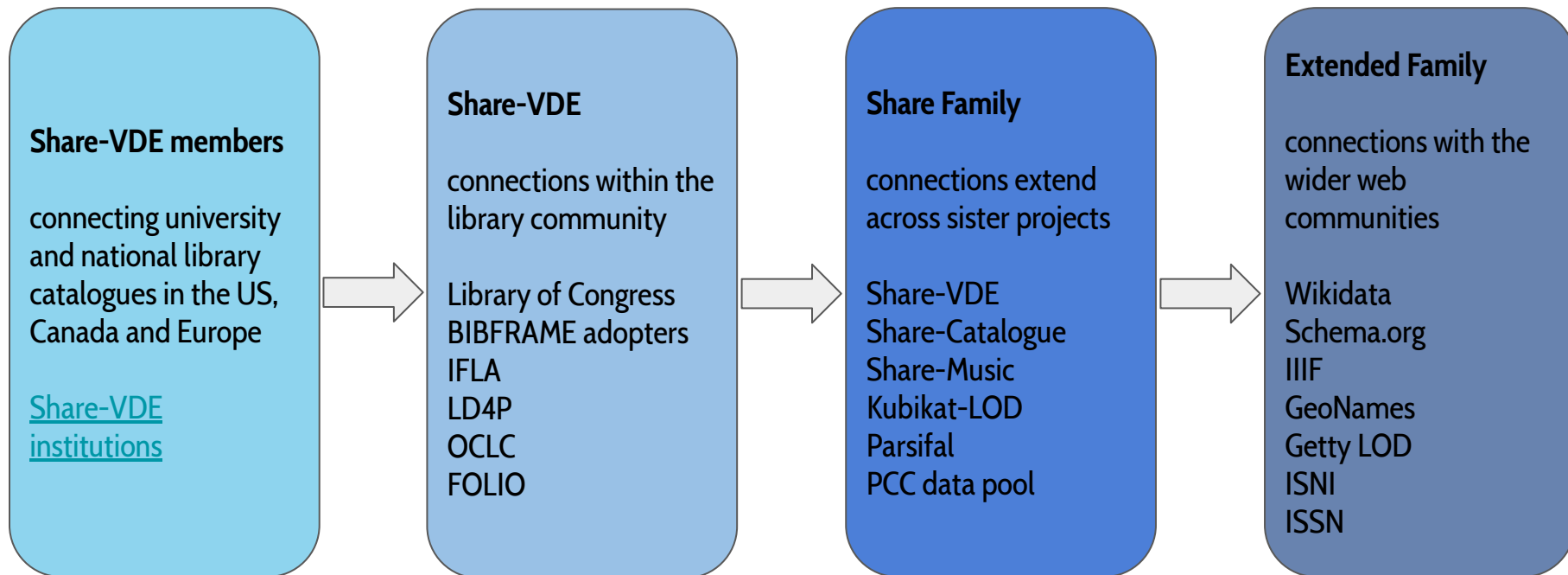


A **virtual discovery platform** with the structure based on **BIBFRAME** data model is created to simplify the way in which that data is consumed.

The network of resources created is the basis for the **Share-VDE Sapiientia Cluster Knowledge Base**, the common authoritative source of clusters accessible in RDF, open to the entire Share-VDE community.

# The Share Family

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# Share-VDE Advisory Council & Working Groups

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The Share-VDE AC determines future uses and vision for the Share-VDE initiative; sets development priorities; monitors the work of working groups; and maintains communication among Share institutions and other groups.

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

# Latest achievements

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Design of the **J.Cricket** Cluster Knowledge Base Editor with the CKB Editor working group



Analysis of authority services with the Authority Identifier Management Services working group and initial release of the authority control features (delivered to Stanford)



Analysis for the integration with **Wikidata** and ISNI in AIMS and CKB working groups



Revision of the entity model with the Sapiientia Entity Identification working group

# Road map: 2021 Q3 & Q4

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The SVDE 2.0 roadmap for the remainder of 2021 includes:

- Discovery:
  - Search Interface
  - Search APIs
- Cluster Knowledge Base 2.0 refactoring
- J.Cricket editor release
- Testing of authority services
- Ongoing updates of the PCC data pool
- Ongoing work on Sinopia/QA interaction



<https://www.flickr.com/photos/revdrpepper/46815577174/>

# Sapientia Entity Identification Working Group (SEIWG)

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## **Mandate**

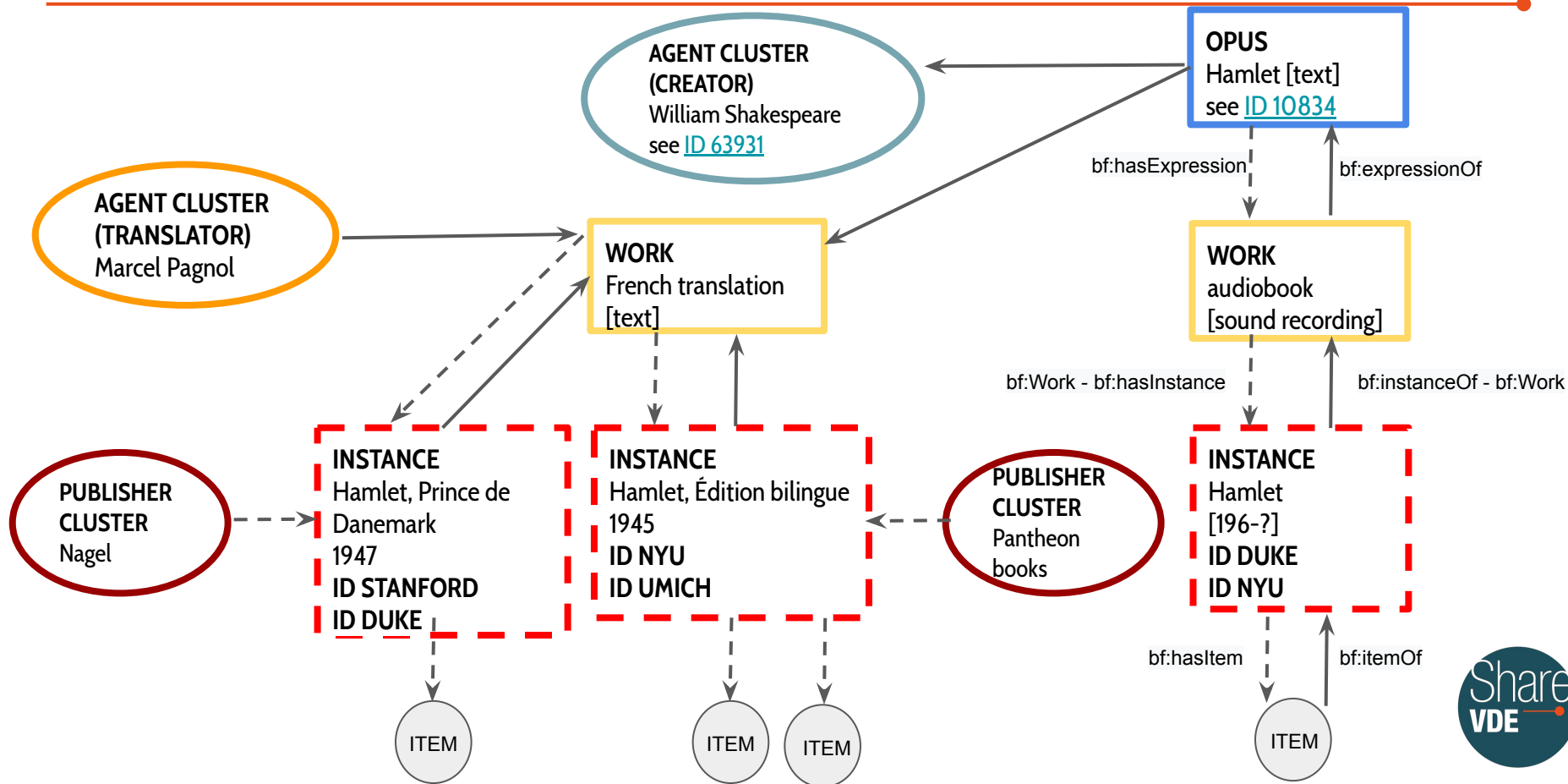
The SEIWG will:

1. Review use of entities, identifiers, and associated modelling in the Sapientia KB
2. Review and refine processes for Sapientia entity clustering in Share-VDE and the creation of associated open and stable URI for use in Share-VDE and the library community
3. Review MARC 21 to BIBFRAME and BIBFRAME to MARC conversion of elements related to entities in Sapientia
4. Engage with the library community to identify and/or develop best practices for use of Sapientia identifiers in BIBFRAME and MARC 21 data

## **In advance of Share-VDE 2.0 work has focused on:**

- Further elaboration and refinement of Work and Opus entities
- Identification, conversion specifications and clustering for the Instance Entity
- In general, refinement and finalization of this iteration of the data model.
- Interoperability: Multiple communities, 1 model
  - BIBFRAME, LRM, and RDA working together

# Share-VDE model (simplified version)





# Opus

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The Share-VDE Opus is a type of bf:Work.

This work type is similar to the Library of Congress Hub in the sense that it provides clustering features for bringing all the works under a canonical work type.

The SEI team have worked on defining properties that provide this clustering functionality for the related cluster of Works.

# Work

Share-VDE Work maps to BIBFRAME Works and are compatible fully with BIBFRAME correspondances for Work properties.

## PCC BF2 Work (Monograph)



Contribution  
(Creator(s)/Contributor(s))

[Primary Contribution](#)

[Contribution](#)

[Title Information](#)

[Form of Work](#)

[Date of Work](#)

[Place of Origin of the Work](#)

[In series](#)

[\(Geographic\) Coverage of the Content](#)

[\(Time\) Coverage of the Content](#)

[Intended Audience](#)

[Notes about the Work](#)

Contribution (Creator(s)/Contributor(s))



Primary Contribution

[+ Add another](#)

[+ Add Primary Contributor \(one only!\)](#)

[+ Add Relationship Designator](#)

Contribution

[+ Add another](#)

[+ Add Contributor](#)

[+ Add Relationship Designator](#)

Title Information \*

Title--Work Title

[+ Add another](#)

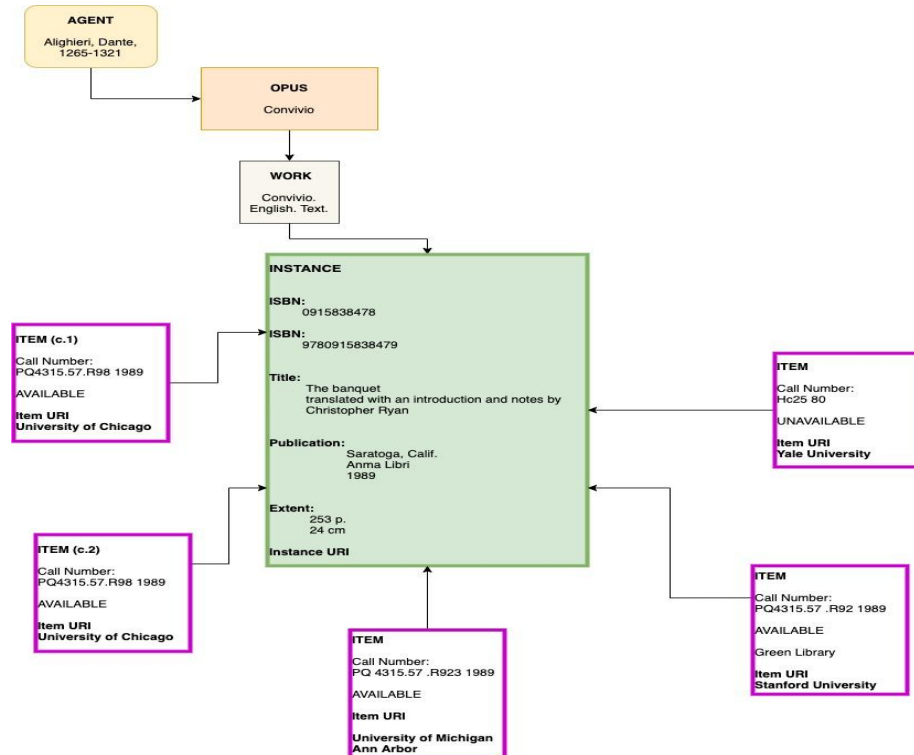
[+ Add Preferred Title for Work](#)

[+ Add Part number](#)

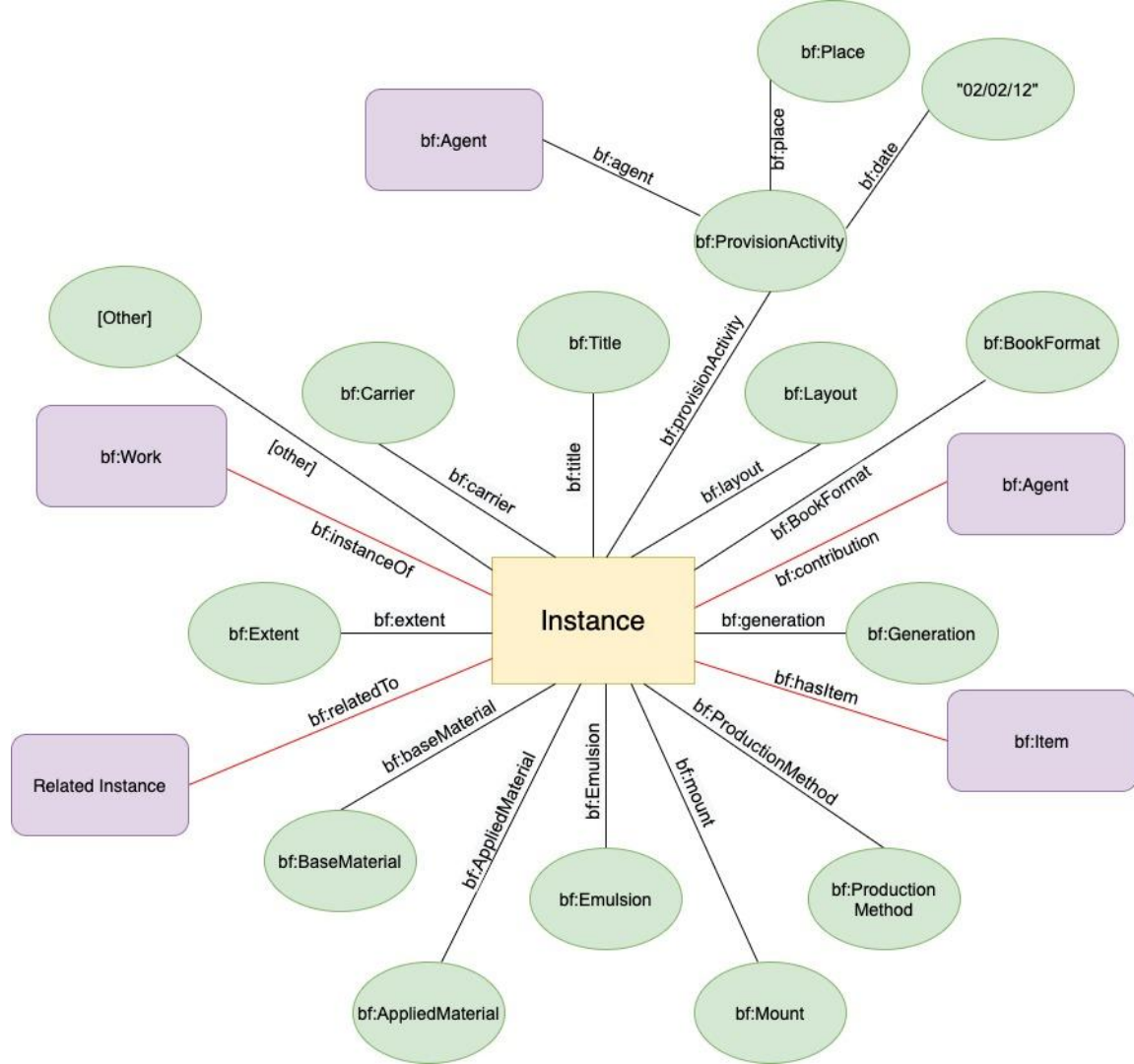


# Instance

Development of Instance Clustering Process, Introducing the canonical Instance. The SEI team has worked on defining properties that provide this clustering functionality for the related Instances.



# Instance modeling



# Stardog Example

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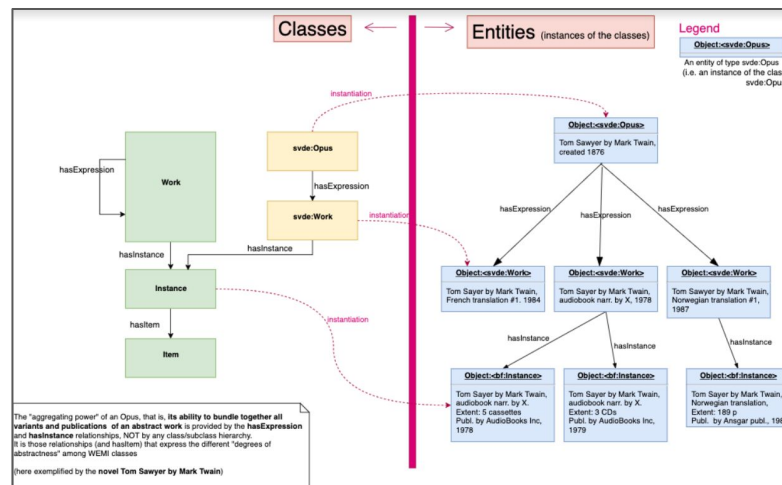
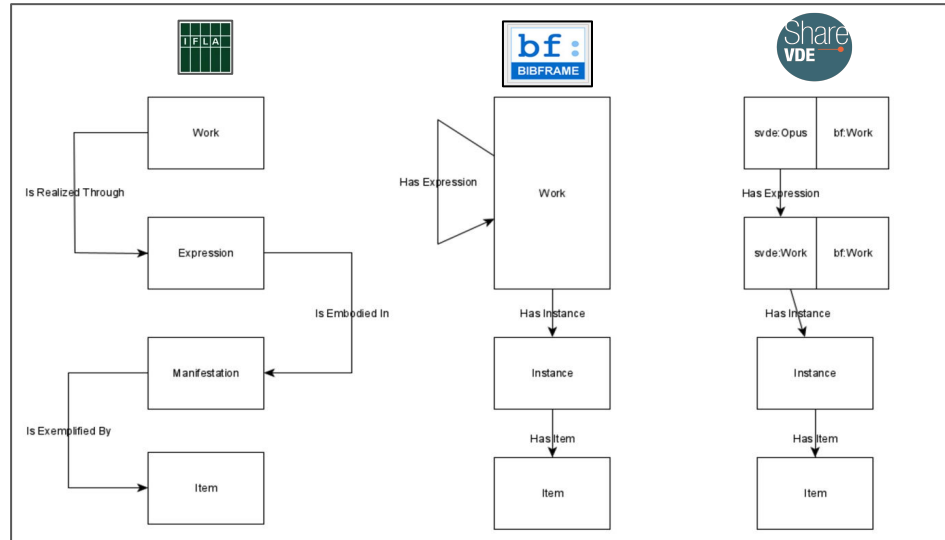
Share-VDE\_prod ●  
Triple Count: ~24B



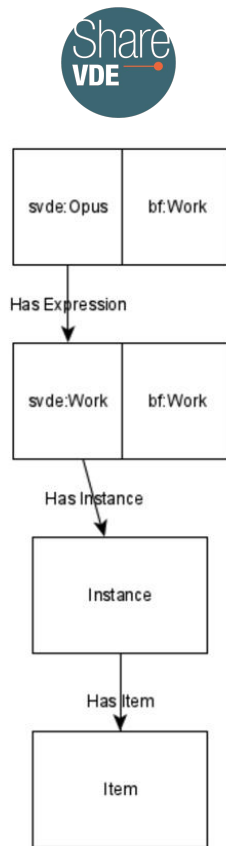
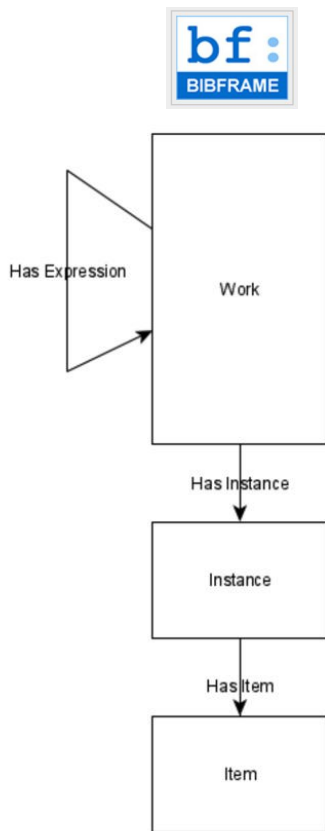
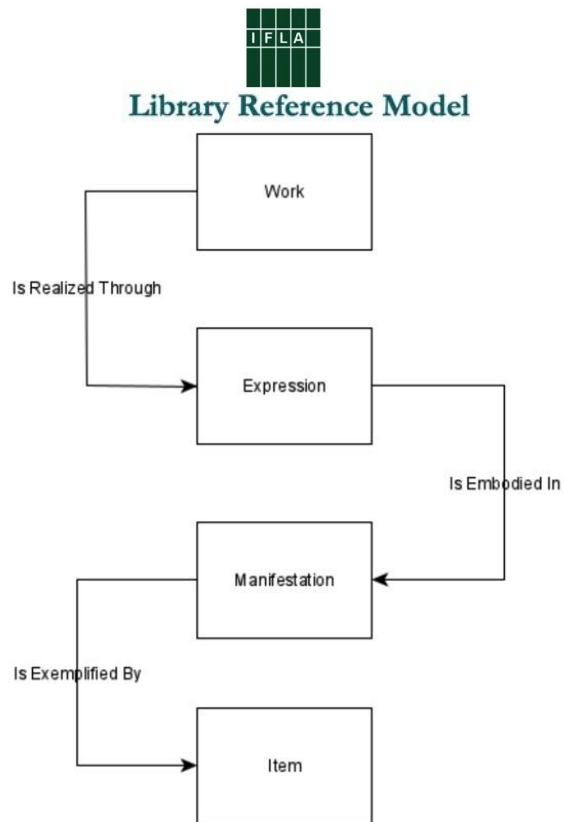
# Facilitate interoperability between entity models...

Participation in LD4P3: the challenge of **data models interoperability**

See the [SVDE entity model](#) compared to [BF](#) and [LRM](#) and an [example of application of the model](#)



# Share-VDE entity model



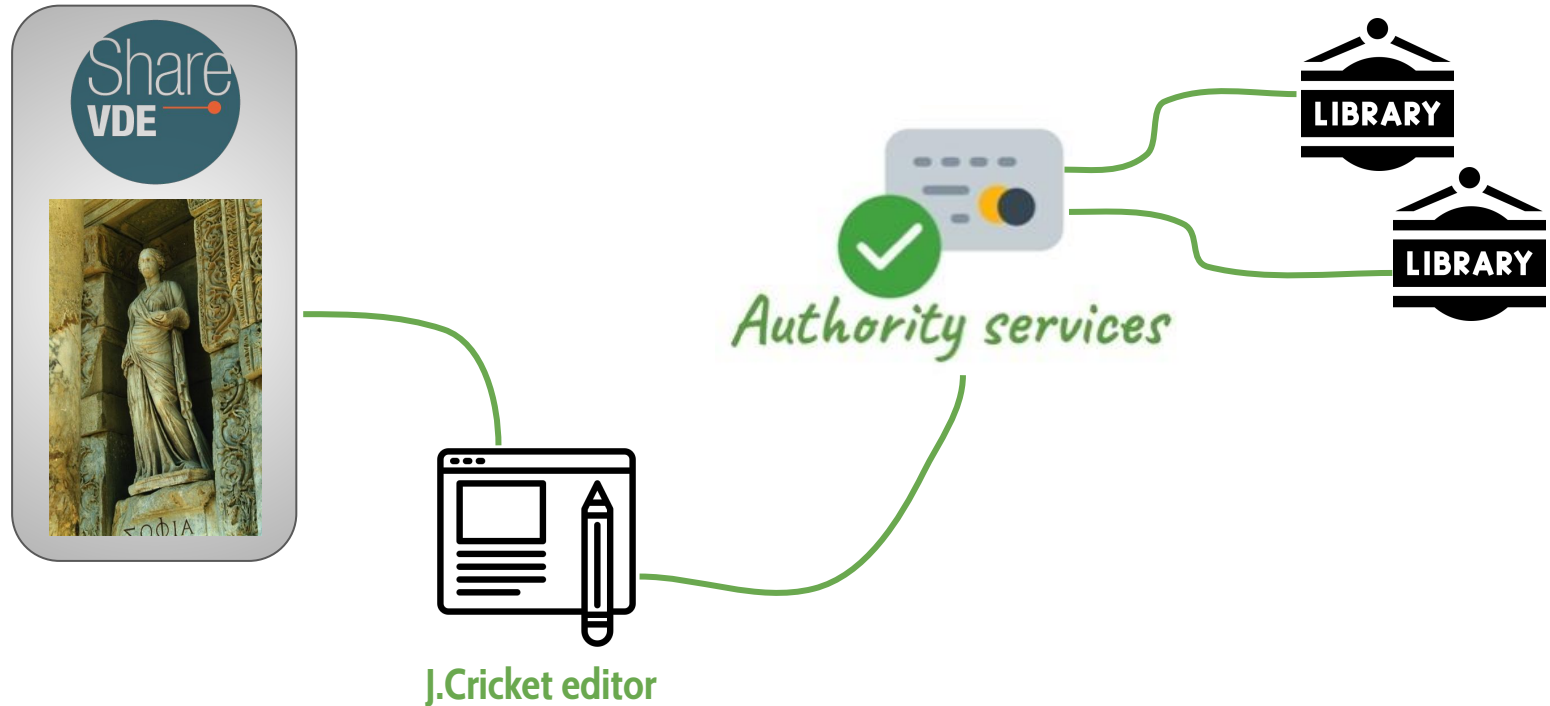


## Authority/Identifier Management Services working group - Background

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- Defines guidelines and best practices for Authority/Identifier management services in linked data environments
- Defines scope and data-flow for the creation and implementation of automated services based on use cases defined by the group
- Proposes additional use cases identified as essential for effective knowledge base management.
- Works closely with Cluster Knowledge Base Group
- Contains members from several different types of libraries across Europe and North America
- Serves as knowledge sharing space for innovative approaches to authority workflows at each institution

# Integration - new Authority services generation



# AIMS - Integrations

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# AIMS - Current and Future Work

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- MARC Authority Workflow established and in testing phase at Stanford
- AIMS members currently undertaking review of that service to provide feedback for enhancements
- Additional integrations with other sources of authority data
- Working with LD4 Change Management for Authoritative Data WG
- Development of BIBFRAME authority workflow

# The Cluster Knowledge Base and the CKB editor

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## *Sapientia Cluster Knowledge Base:*

- Sapientia includes the clusters of entities created in the reconciliation and conversion to linked data of the catalogues of all Share-VDE participating libraries;
- the first release of Sapientia is online and the database is constantly enriched with the new data created by libraries and converted by Share-VDE;
- **more than 100 millions of bibliographic records and 24 millions of authority records** have been processed;
- Sapientia contains **400 millions triples** in its triplestore, and **24 billions quads** of converted bibliographic records.

## *J.Cricket Cluster Knowledge Base editor:*

- J.Cricket is the module dedicated to the editing of the SVDE entities, essential for the management of Share-VDE database;
- the initial model of the J.Cricket Cluster Knowledge Base Editor has been analysed from a functional perspective, along with the design of its user interface;
- the result will be a collaborative environment enabling the editing of the entities managed in Share-VDE (works, authors etc.).

# CKB WG Initial Goals

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- Review and define use workflow cases for updating and creating entities and relationships
- Propose an editor interface (J.Cricket) to enable management of entity clusters
- Contribute metadata knowledge to the design of the interface

# CKB Collaborations

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- Worked with Filip Jakobsen (Samhæng) to sketch interface designs for J.Cricket
- Rejoined up with the AIMS group to address crossover functions for J.Cricket
- Reviewed use cases for integration of Wikidata into J.Cricket interfaces sketches

# CKB + AIMS

← →

Connect external IDs · Share-VDE

Share-VDE

Search all content...

Connect to external IDs

Name

Isaiah Thomas

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

This Wikidata entity has a potential duplicate on Wikidata

Review for merge

**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



# Integration - the end user perspective

Search for a person for whom

Simple search

Search for...

- ☐ Agent of any type
- ☒ Person (e.g. Jules Verne or Marina Abramović)
- ☐ Family (e.g. Smith family or Benson family)
- ☐ Organization (e.g. CERN or Penguin Books)
- ☐ Conference (e.g. AIAA Thermophysics Conference)
- ☐ Original work or publication
  - ☐ Original work (e.g. Around the world in 80 days)
  - ☐ Publication (e.g. Around the world in 80 days, 3rd edition, 1906)

4 results

Filter related people... Year of birth

Name	Year of birth	Description
...	...	...

Integration is the core of the SVDE platform that aggregates data from multiple libraries to form clusters of entities.

SHARE-VDE

William Shakespeare > Hamlet > ... Second quarto

Publication

## Hamlet: Second quarto

Book written by Weston Babcock in English, published in London by Bloomsbury in 2015

[London] : Bloomsbury, [2015] : 1 online resource (11 audio files (1 hr., 57 min., 41 sec.)) : digital, stereo · Computer · Spoken word · Online resource · 822.23 · Library of Congress call no. PR2827 · Access restricted by licensing agreement · Starring Jamlee Bamber [and seventeen others]. Audio recordings · Monograph

[Read online now](#) [Borrow a copy at UC Berkeley](#) More options

[Copies of this p.](#) [Related subjects](#) [Other English book editions of "Hamlet"](#)

6 results

Filter publications... Language Location All filters Held at Penn

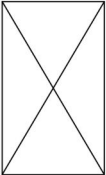
Copy no.	Type	Location	Call no.	Availability
1231 2415 3489	Online resource	HathiTrust	Van Pelt > ABC123912414	Online
9387 8492 1289	Physical item	UPenn	Van Pelt > ABC123912414	Available at Penn
9487 1293 0293	Physical item	UChicago	Van Pelt > ABC123912414	Available at partner institution

From the end user perspective: the discovery platform has to accurately represent the entity model, but also provide an intuitive experience, seamless navigation and rich resources to the end users. A new, advanced discovery interface is being developed to harness the potential of linked data.

# Integration - J.Cricket: the professional perspective

SHARE-VDE

Search all content...



Person

**William Goulding**

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

Sir William Gerald Golding, 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 Golding	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

Click to add to merge list

2 original works selected View selected ^

Deselect all Add relationship Merge Add to my merge list

SVDE is evolving from a discovery platform that converts MARC data of libraries in Linked Open Data to an interactive authoritative source providing real services for libraries. This transition is happening through the editor named J. Cricket, that is the new application dedicated to the editing of SVDE data in a collaborative environment.

# Integration - J.Cricket: the professional perspective

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

J.Cricket will extend authority capabilities through the integration with external data sources such as Wikidata and ISNI.

SHARE-VDE

Search all content...

Q

3D

➔

## 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

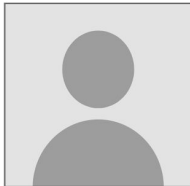
[←](#) [→](#) Edit: "Isaiah Thomas" · Share-VDE

Share-VDE

Q Search all content...

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	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	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	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	1773	1819	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

[illegible]

VAC

ANCE SEARCH

AGENTS ☐ WORKS ☐

CRITERIA	TEXT
CONTAINING	DOE, JOHN

OK: = D., John?

SEARCH

JOHN DOE

MORE JOHN DOE

CORE

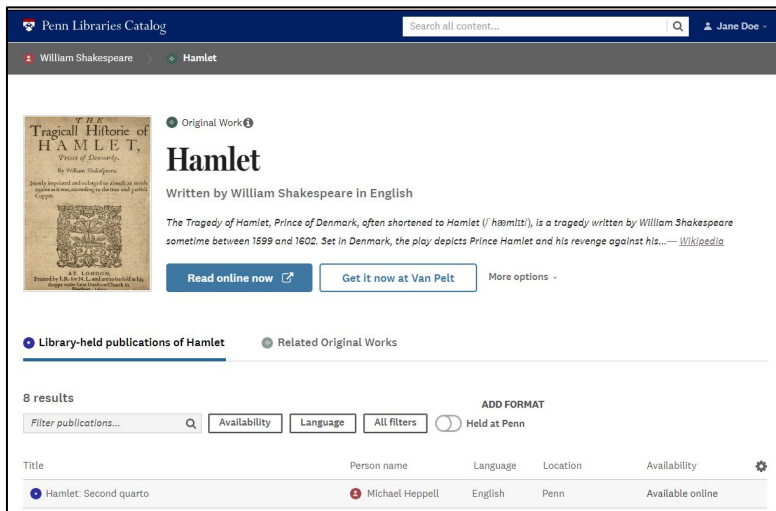
3 MOST

RECENT  
POPULAR  
LINKED

WORKS

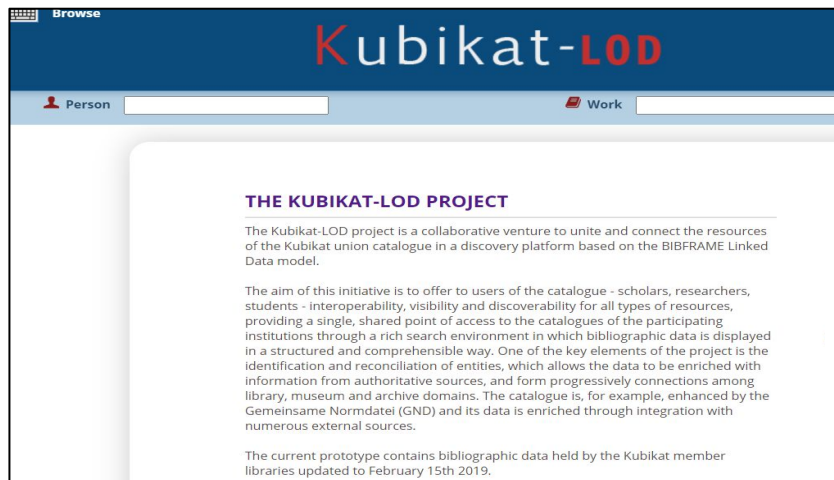
# Autonomy - the end user perspective

## SVDE localisation for the University of Pennsylvania



The screenshot shows the Penn Libraries Catalog interface. At the top, there's a search bar and a user profile for Jane Doe. Below the navigation bar, the breadcrumb trail shows 'William Shakespeare' and 'Hamlet'. The main content area features a book cover for 'The Tragicall Historie of HAMLET, Prince of Denmark' by William Shakespeare. To the right of the cover, the title 'Hamlet' is displayed, followed by 'Written by William Shakespeare in English'. A descriptive paragraph follows, mentioning the play's origin and a link to Wikipedia. Below this, there are two buttons: 'Read online now' and 'Get it now at Van Pelt', along with a 'More options' link. A section titled 'Library-held publications of Hamlet' is active, showing '8 results'. Below this, there are filters for 'Availability', 'Language', and 'All filters', along with a 'Held at Penn' toggle. A table lists the results, with the first entry being 'Hamlet: Second quarto' by Michael Heppell, in English, available online.

Kubikat-LOD project platform



The screenshot shows the Kubikat-LOD project platform interface. At the top, there's a 'Browse' button and the 'Kubikat-LOD' logo. Below the navigation bar, there are two input fields: 'Person' and 'Work'. The main content area features a section titled 'THE KUBIKAT-LOD PROJECT'. The text describes the project as 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. It further explains the aim of the initiative, which 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. At the bottom, it states that the current prototype contains bibliographic data held by the Kubikat member libraries updated to February 15th 2019.

# Resources

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Resources about Share-VDE and the Share family:

- [Share-VDE wiki](#)
- [Share-VDE brochure](#)
- [Video introducing Share-VDE](#)
- [LOD Platform](#) (the technology underlying the Share system)



# Heading to New Heights Together - Thanks!

