The Share Family initiative to bring Linked Open Data into practice

November 17th 2023

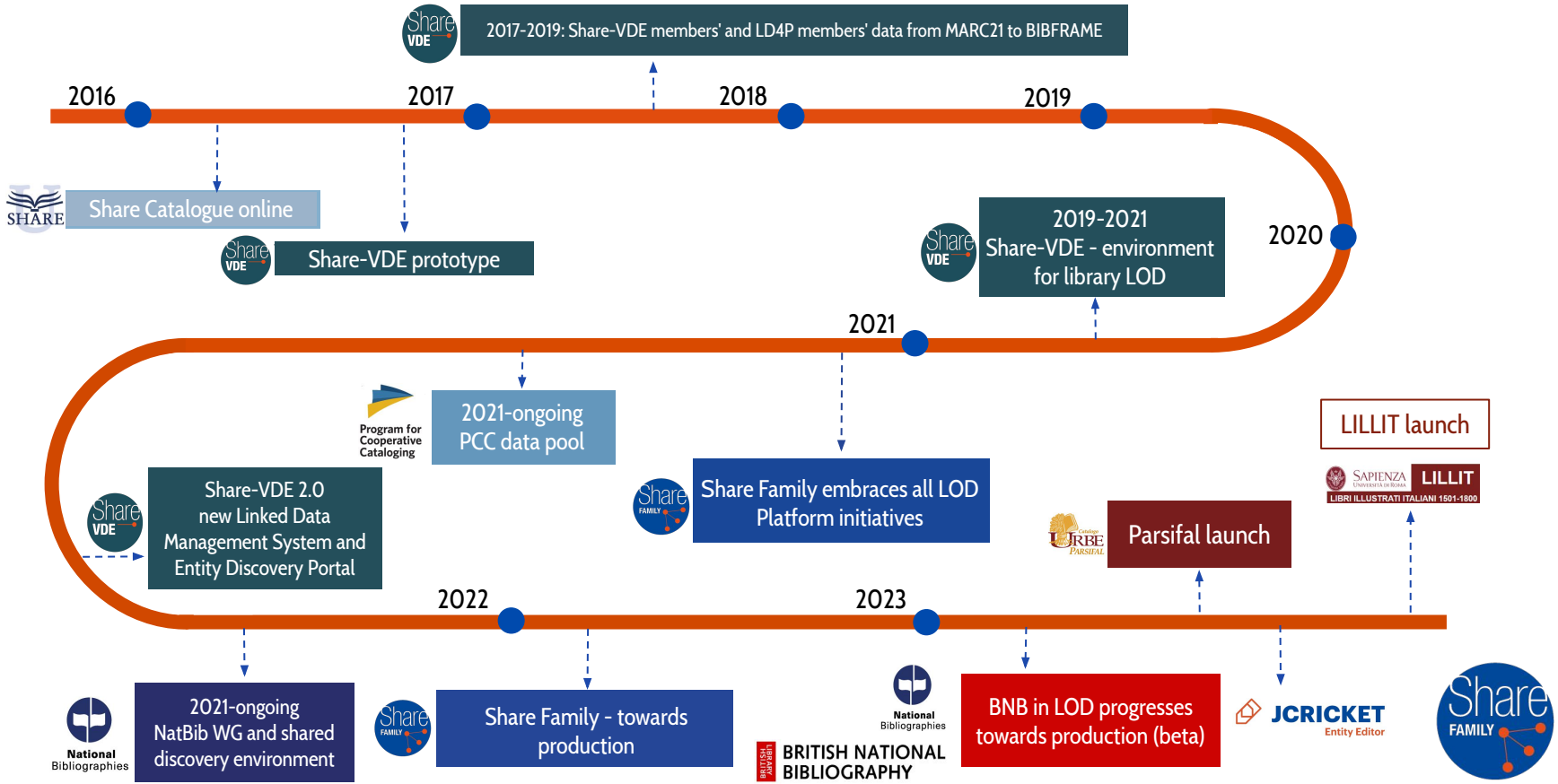
https://www.share-family.org/
https://wiki.svde.org
info@svde.org

Summary

- ✔ Share-VDE background and the Share Family
- ✔ Working Groups and cooperation
- ✔ Towards an operational environment
- ✔ JCricket - The Entity Management System

Share-VDE background and the Share Family

Stepping stones



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.

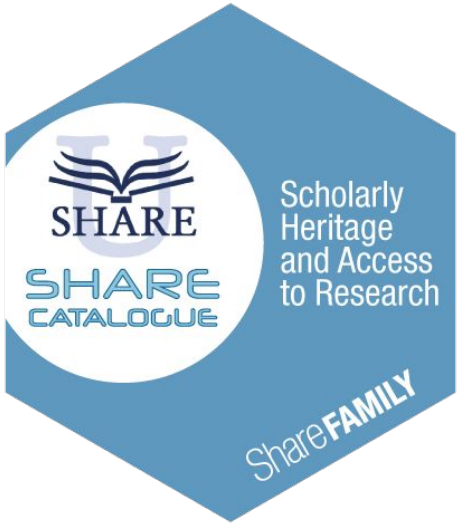
For further details please refer to https://www.share-family.org and the dedicated Share-VDE wiki section.

Share-VDE - Virtual Discovery Environment

https://www.svde.org

Berkeley Law Library
Duke University
Library of Congress
National Library of Finland
National Library of Norway
New York University
Smithsonian Libraries and Archives
Stanford University
University of Alberta / NEOS Library Consortium
University of Chicago
University of Michigan Ann Arbor
University of Pennsylvania
Vanderbilt University
Yale University

Share Catalogue: Scholarly Heritage and Access to Research



Share Catalogue discovery portal

Università degli Studi di Napoli Federico II

Università degli Studi della Basilicata

Università degli Studi del Sannio

Università degli Studi di Salerno

Università degli Studi di Napoli Parthenope

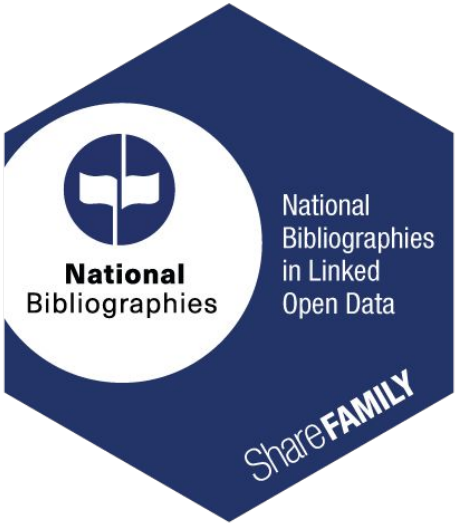
Università degli Studi del Salento

Università degli Studi di Napoli L'Orientale

Università degli studi della Campania Luigi Vanvitelli

Università degli Studi Suor Orsola Benincasa

National Bibliographies in Linked Open Data



https://natbib-lod.org/

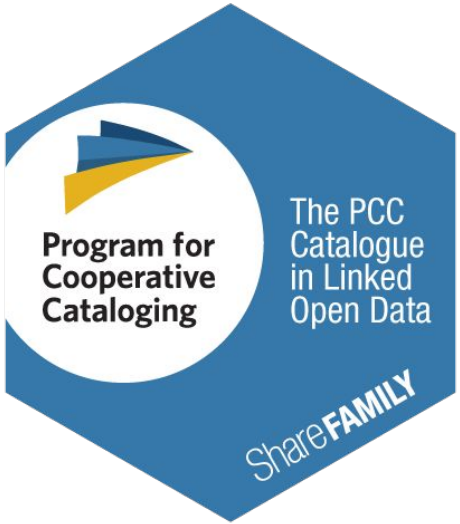
The aggregation of data from National Bibliographies in a shared entity discovery environment; the first of these is the BNB - British National Bibliography, soon to go into production.

BRITISH LIBRARY BRITISH NATIONAL BIBLIOGRAPHY BETA

The linked open data BNB beta website is available at

https://bl.natbib-lod.org/

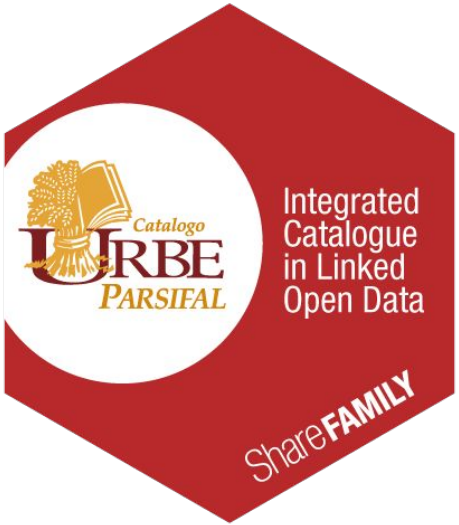
PCC Catalogue in Linked Open Data



The Share Family hosts a dedicated tenant for the data of the PCC - Program for Cooperative Cataloging, to provide PCC-quality BIBFRAME data housed in an ad hoc data pool

https://pcc-lod.org/

Parsifal - Integrated Catalogue in Linked Open Data



https://parsifal.urbe.it/parsifal/?l=en

Accademia Alfonsiana

Centro Pro Unione

Pontificia Facoltà di Scienze dell'Educazione "Auxilium"

Pontificia Facoltà Teologica "Marianum"

Pontificia Università Antonianum

Pontificia Università della Santa Croce

Pontificia Università di San Tommaso d'Aquino (Angelicum)

Pontificia Università Gregoriana

Pontificia Università Lateranense

Pontificia Università Urbaniana

Pontificio Ateneo Sant'Anselmo

Pontificio Istituto Biblico

Pontificio Istituto Orientale

Pontificio Istituto Teologico "Giovanni Paolo II" per le Scienze del Matrimonio e della Famiglia

Pontificium Institutum Patristicum Augustinianum

Università Pontificia Salesiana

Share Art, Share Music, Share MIA

Three pilot projects for shared Linked Open Data environments in the domains of Art, Music and Manuscripts, Incunabula and Ancient books

Share Family - Linked Data Ecosystem

AUTHORITATIVE PRINCIPLES

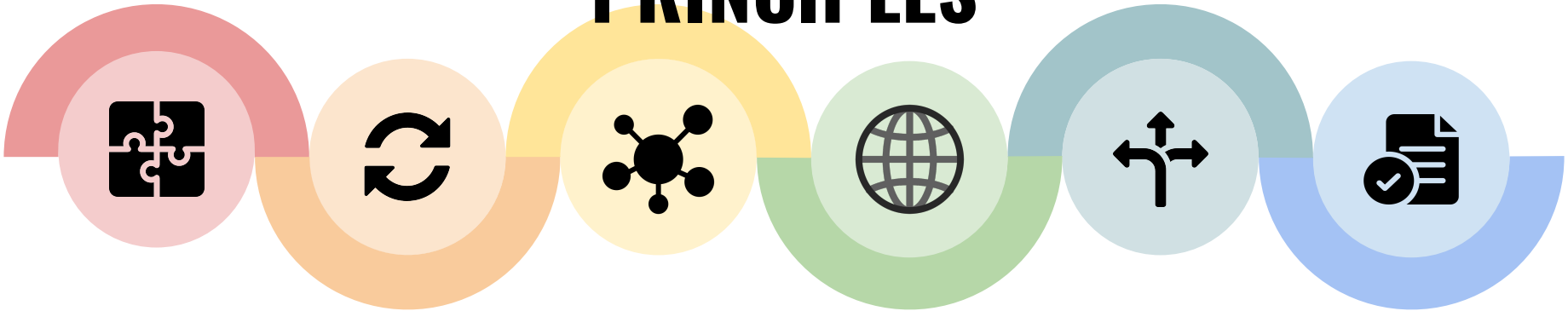
The quality of data is guaranteed both through advanced technical processes and through collaborative data modeling, enrichment and sharing, handled collectively by member organizations.

CO-OPERATIVE

INTEROPERABLE

FLEXIBLE

PRINCIPLES



SUSTAINABLE

OPEN

AUTHORITATIVE

Share Family - Linked Data Ecosystem

PROCESSES

DATA INPUT FROM INSTITUTIONS

- MARC21 bib. and holding
- MARC21 aut.
- UNIMARC
- RDF/BIBFRAME
- Other formats (eg. FOLIO)

LOD PLATFORM SERVICES

PROCESSES

- *Mapping*
- *ML Enrichment*
- *Reconciliation*
- *Creation of Linked Data Entities*
- *Conversion to RDF/BIBFRAME*

RESULTS

Data Publication

- *End user discovery portals for each initiative of the Share Family*
- *Search APIs for data consumption (GraphQL, REST, SPARQL)*
- *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)*
- *Share Family Index: registry of entity URIs*

Data Distribution

Shared Data Management

- *Editing of Share Family entities with ICricket*
- *BIBFRAME/RDF, MARC-enriched records and BIBFRAME data in local library systems*
- *Authority control in MARC and BIBFRAME-based workflows*
- *Reuse of Share Family MARC representations in local library systems*

Additional Services

Outputs for consortia or single libraries

Linked Data Descriptions and Enriched MARC Records

- The Library catalogue is converted in linked data entities according to BIBFRAME 2.0. The entities are then enriched both with native and persistent SVDE URIs and URIs from external sources.
- MARC records from the original library catalogue are enriched both with native SVDE URIs and URIs from external sources.

Discovery Portal

- Advanced entity discovery system based on BIBFRAME
- Customised UI (skin)
- Integration with local APIs
- Site mapping with additional meta-tagging
- Data conversion to Schema.org

JCricket Entity Editor

- It's a manual collaborative tool designed to manage properties (attributes, relations, and links) of entities in the Cluster Knowledge Base, improving data quality through tasks like creation, merging, and splitting.
- Data can always be traced back to each Institution through the Provenance.
- It can potentially support other workflows and connections with systems external to the Share Family

Authoritative Services

- Innovative solutions that facilitate and improve authority control through automatic and manual procedures.
- Libraries to receive constantly updates on their bibliographic and authority records from authoritative sources.
- Authority Services currently available for MARC-based workflows offer automated URI enrichment, reconciliation and validation of library data.

Collaboration for enhancing library workflows and services

Member libraries send their records

both for their community of users and librarians

Sapientia Cluster Knowledge Base, a **collaborative source of high quality data**: the CKB includes the clusters of entities created in the reconciliation and conversion to linked data of the catalogues of all Share-VDE participating libraries

Data in the CKB is enhanced by JCricket Entity Editor

According to their local or network policies, libraries can implement their **services**

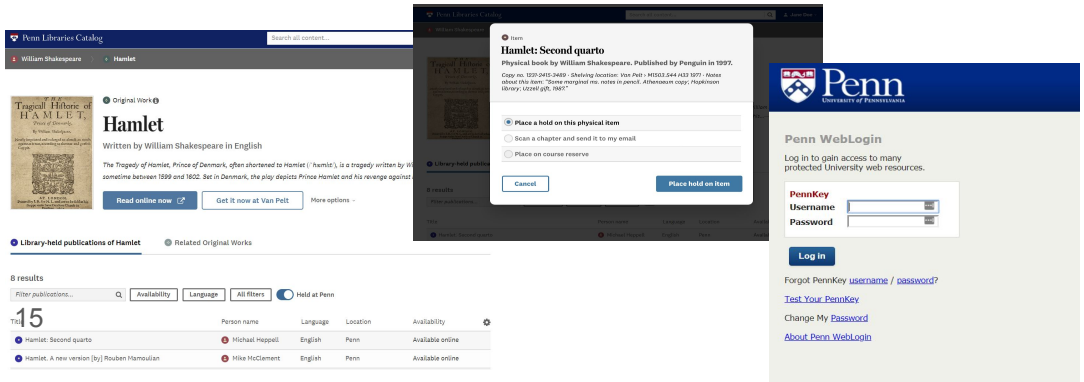
SERVICE

Integration with Other Systems

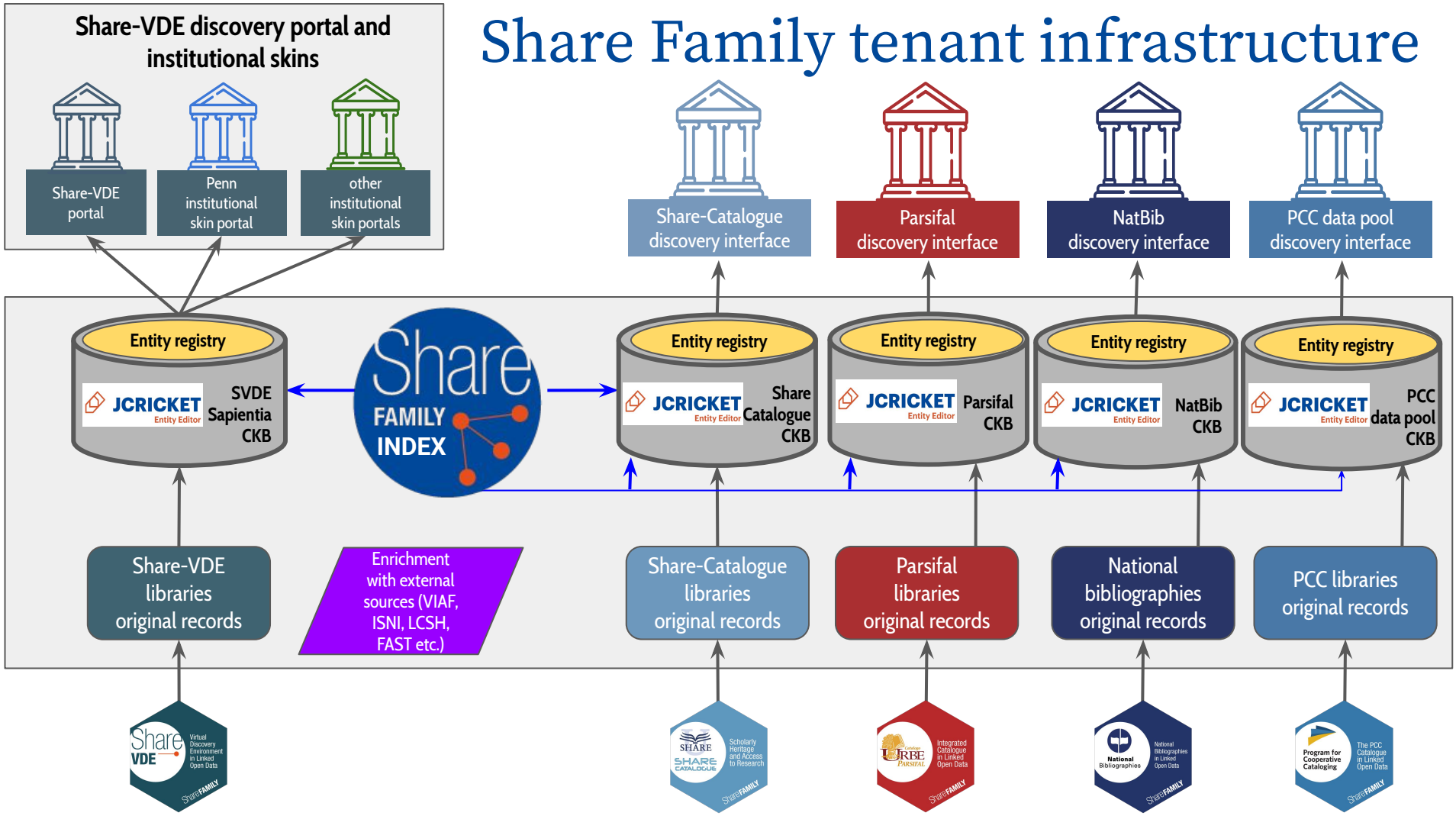
- Development of APIs for interoperability and cooperation with local LSPs and third parties (including FOLIO, Wikidata, LD4P - Linked Data for Production)

- discovery portal
- authoritative services
- shared cataloguing
- statistics and evaluation
- collection development
- interlibrary loan

and so on!

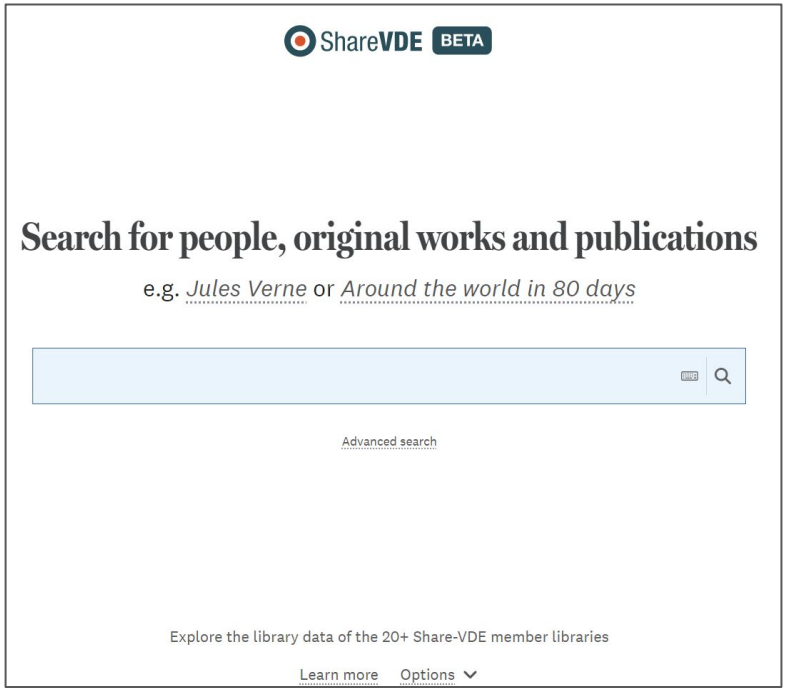


Share Family tenant infrastructure



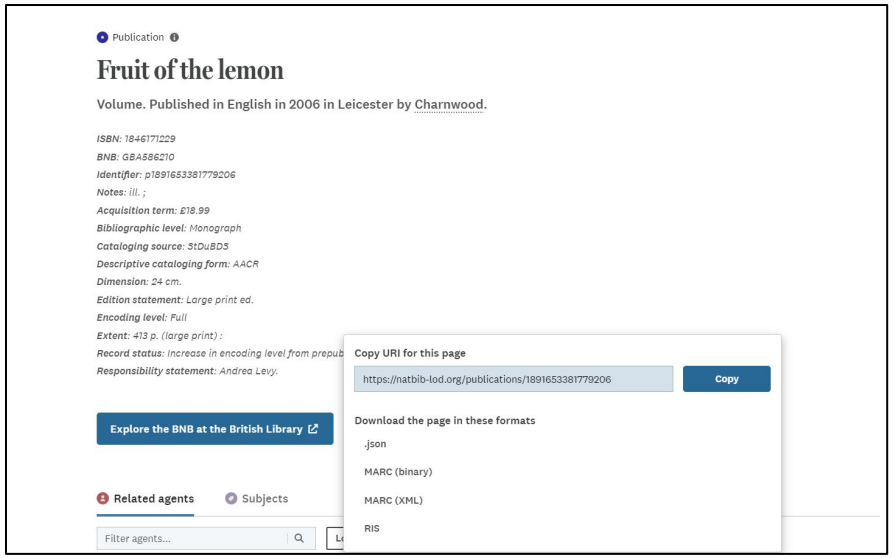
Default configuration: SVDE and PCC data pool

Simple search default configuration on SVDE and PCC data pool portals



Default configuration: British National Bibliography

Simple search default configuration on Natbib tenant and the BNB - British National Bibliography skin*



* the British Library announced the launch of the beta version of the British National Bibliography Linked Open Data Portal

Default simple search configuration: the BNB

Simple search default configuration on Natbib tenant and the BNB - British National Bibliography skin* is set to Publications search, instead of the SVDE default.

This was done to comply with a different requirement whereby for the data stored in this tenant (ie. national bibliographies) it's meaningful to direct users to publications.

Different communities or types of institutions might need customised features

(*) *Note: the skin for the British National Bibliography is a preview of a beta site.*

Share Family tenant infrastructure

- The Share Family of initiatives includes different branches and sister projects, supported by the same LOD Platform technology. Each branch or project is hosted in a specific tenant of the system architecture with a corresponding specific Cluster Knowledge Base and a dedicated web entity discovery portal.
    - For more details on the Share Family tenant infrastructure see the Summary of Share Family tenants.

- In some cases, within a single tenant a customised skin (ie. a sub-portal of the main entity discovery) can be created to address ad hoc needs of an institution, or group of institutions, willing to expose only their own data or to integrate local services in the Share environment.
    - For example, Share-VDE entity discovery portal at svde.org is one of such tenants, including a pool of data from a number of institutions, and the respective skin portals.

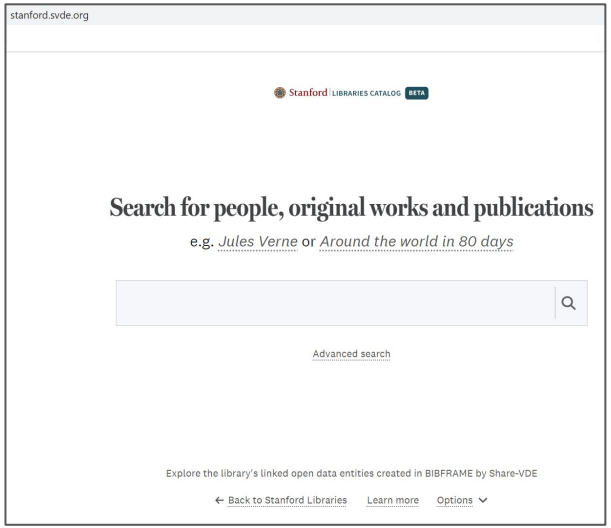
Institutional skin portals within a tenant

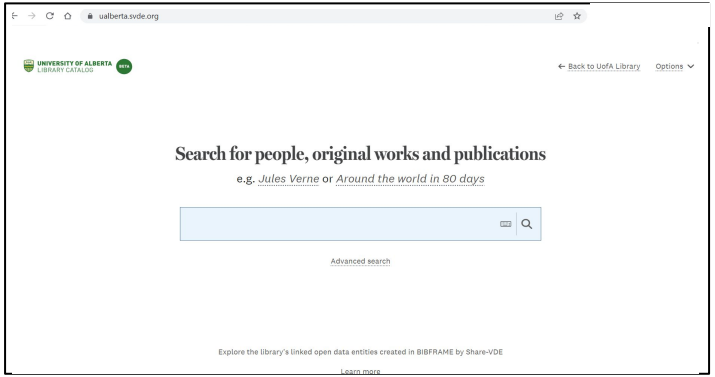
- While the main entity discovery portal of a tenant shows the data of all the institutions feeding the tenant's Cluster Knowledge Base, the skin portal gives the ability to filter only the data of the institution that the skin portal has been designed for.

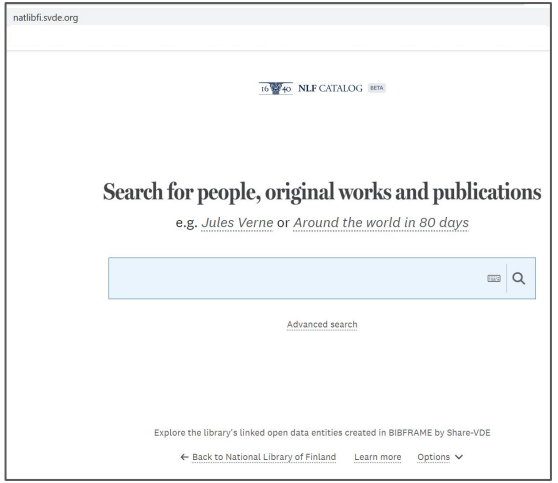
- To this aim, the “held at” filter was added, allowing to filter publications by what is available at the current library. It is enabled on skin portals at Publication (= Instance) level in these cases:
  - in advanced search, see e.g. NYU data pre-filtered here https://nyu.svde.org/advanced-search/publications?q=(title+does_not_contain+xyz)&heldAtLibrary=true (see the toggle on the right of the screen, you can turn it on / off)
  - in the Original work entity page that lists Publications, see e.g. https://nyu.svde.org/suite-de-la-mancha-flute-cello-piano-unknown-author-o781654264663247/library-publications (see the toggle on the right of the screen, you can turn it on / off)
  - in simple search results in cases where the simple search default on the home page is the Publication simple search (e.g. Natbib tenant)

Example: institutional skin portals in SVDE

- **SVDE tenant** - https://svde.org => with LC's authority data and the bibliographic data of member institutions
  - skin portals including: Penn, Smithsonian, Stanford, University of Alberta, New York University, National Library of Norway, National library of Finland (other skin portals will be set up following the load of libraries' catalogues to svde.org)







Working Groups and cooperation

Share-VDE and Share Family Working Groups

Member institutions of Share-VDE and Share Family Working Groups and parallel projects are constantly contributing with their Subject Matter Experts to requirements gathering, functional analysis and feedback to developments.

Share Family Working Groups:

- National Bibliographies Working Group involving SVDE members and external institutions
- Italian group for the conversion UNIMARC - BIBFRAME
- discussions in the field of photo libraries and audio-visual collections

Share-VDE Advisory Council and Working Groups:

- Share-VDE Advisory Council
- Sapientia Entity Identification WG
- Authority/Identifier Management Services WG (currently on hold)
- Cluster Knowledge Base Editor WG (currently on hold)
- User experience/User Interface WG

Share-VDE Advisory Council

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

Among the latest outcomes:

- Share-VDE Executive Summary, December 2022, summarising the scope of Share-VDE in the context of Linked Open Data for Libraries;
- Share-VDE Statement, September 2021, explaning the position of SVDE in the broader context of Library Linked Open Data;
- Library and community events sub-group, dedicated to monitoring conferences/events/initiatives of interest for the Share community, and to submitting proposals for presentations as appropriate;
  - see the SVDE wiki Resources page for details about SVDE presentations at conferences and events.

User Experience/User Interface WG

The UX-UI WG has redesigned the Share-VDE user interface to meet the requirements and expectations of both patrons and library staff. SVDE 2.0 entity discovery interface:

- reflects the components of the Share-VDE data model infrastructure;
- harnesses the potential of linked data and delivers wide-ranging and detailed search results;
- provides an intuitive user experience, hiding the complexity of the underlying data model;
- embeds partner APIs for interoperability with local library services (e.g. lending);
- allows dedicated skins, ie. customised sub-portals dedicated to individual institutions.

Among the latest outcomes:

- Share-VDE 2.0 Entity Discovery https://svde.org
- new Entity Discovery Portal and new back-end infrastructure for the Linked Data Management;
- other Share Family discovery portals supported by the same technology;
- review and enhancement of portal features, in conjunction with the National Bibliographies Working Group.

Sapientia Entity Identification WG

The SEI WG reviews the use of entities, identifiers, and associated modelling in the Sapientia CKB; evaluates and refines processes for Sapientia entity clustering in Share-VDE and the creation of associated open and stable URI for use in Share-VDE and in the library community; reviews MARC to BIBFRAME and BIBFRAME to MARC conversion; engages with the library community to outline and/or develop best practices for use of Sapientia identifiers in BIBFRAME and MARC data.

Among the latest outcomes:

- definition of the SVDE Ontology; see also Jim Hahn's presentation at the BFWE 2023;
- svde:Work is subclass of bf:Work → this ensures interoperability;
- review of clustering and conversion rules;
- cooperation in the IFLA context: the mapping UNIMARC-BIBFRAME is being prepared and a formal liaison with SVDE has been approved by the IFLA Bibliography Section Standing Committee.

National Bibliographies WG

The National Bibliographies Working Group is dedicated to facilitating practical cooperation among National Bibliographies, and addressing the needs of National Libraries and institutions that hold National Bibliographies within the framework of a shared entity discovery environment such as the Share Family of initiatives.

Among the latest outcomes:

- overview document National_Bibliographies_Share_Family_initiative_2022-June.pdf
- involvement of SVDE / Share Family members and external institutions;
- IFLA Bibliographic Section liaison (Maud Henry from KBR - Royal Library of Belgium);
- discussion on topics of interest related to hosting national bibliographies as an ad hoc tenant;
- main tenant of the shared discovery environment for national bibliographies: https://natbib-lod.org/;
- implementation of the skin portal for the BNB - British National Bibliography https://bl.natbib-lod.org (this is a preview of a beta site);
- joint work with the SVDE UX-UI working group to design end user services and user interface/discovery features.

Authority/Identifier Management Services WG

The AIMS WG defines guidelines and best practices for Authority/Identifier management; describes 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.

Among the latest outcomes:

- definition of use cases;
- functional analysis;
- study of the interaction with Wikidata and ISNI (joint work with CKBE WG to design JCricket functionalities);
- pilot of MARC-based authority services with Stanford University Libraries;
- assessment of services for authority control in linked data workflows.

Cluster Knowledge Base Editor WG

The CKBE WG examines how libraries interact with the *Sapientia* Cluster Knowledge Base (CKB) and their use of the JCricket Editor for modifying (correcting / enriching), deleting, merging and separating clusters.

Among the latest outcomes:

- back-end developments for JCricket entity editor are completed, front-end features in progress;
- definition of use cases;
- design of manual editing features;
- analysis of interaction with Wikidata and ISNI to be incorporated into JCricket and authority dataflows that feed the Cluster Knowledge Base (joint work with AIMS WG to design JCricket functionalities).

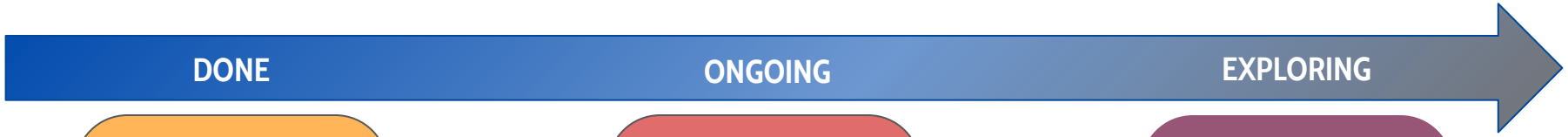
Towards an operational environment

An integrated and hybrid environment

The mutual exchanges in the BIBFRAME / linked data community are bringing the Share Family towards:

- an integrated, “hybrid” operational environment...
- ...based on a variety of tools and diverse data sources...
- ...including traditional workflows (eg. new authority services for MARC workflows) as well as advanced models for data exchange

An integrated and hybrid environment



New authority services for MARC-based workflows - designed with SVDE AIMS working group and Stanford's input

Third parties integration with ILSs/LSPs - local library services (eg. Alma circulation APIs)

Finer granularity level of the CKB - Cluster Knowledge Base to make it format-agnostic and extend input data capabilities (MARC21, UNIMARC, BF/RDF eg. Sinopia profile etc.)

Third parties integration with ILS/LSP - Sinopia

Third parties integration with ILS/LSP - FOLIO

Third parties integration with authority sources:

- LD4P Questioning Authority

- Wikidata (initial specs by SVDE working groups)

- ISNI (initial specs by SVDE working groups)

Application of Share Family tech to other domains (Art, Music)

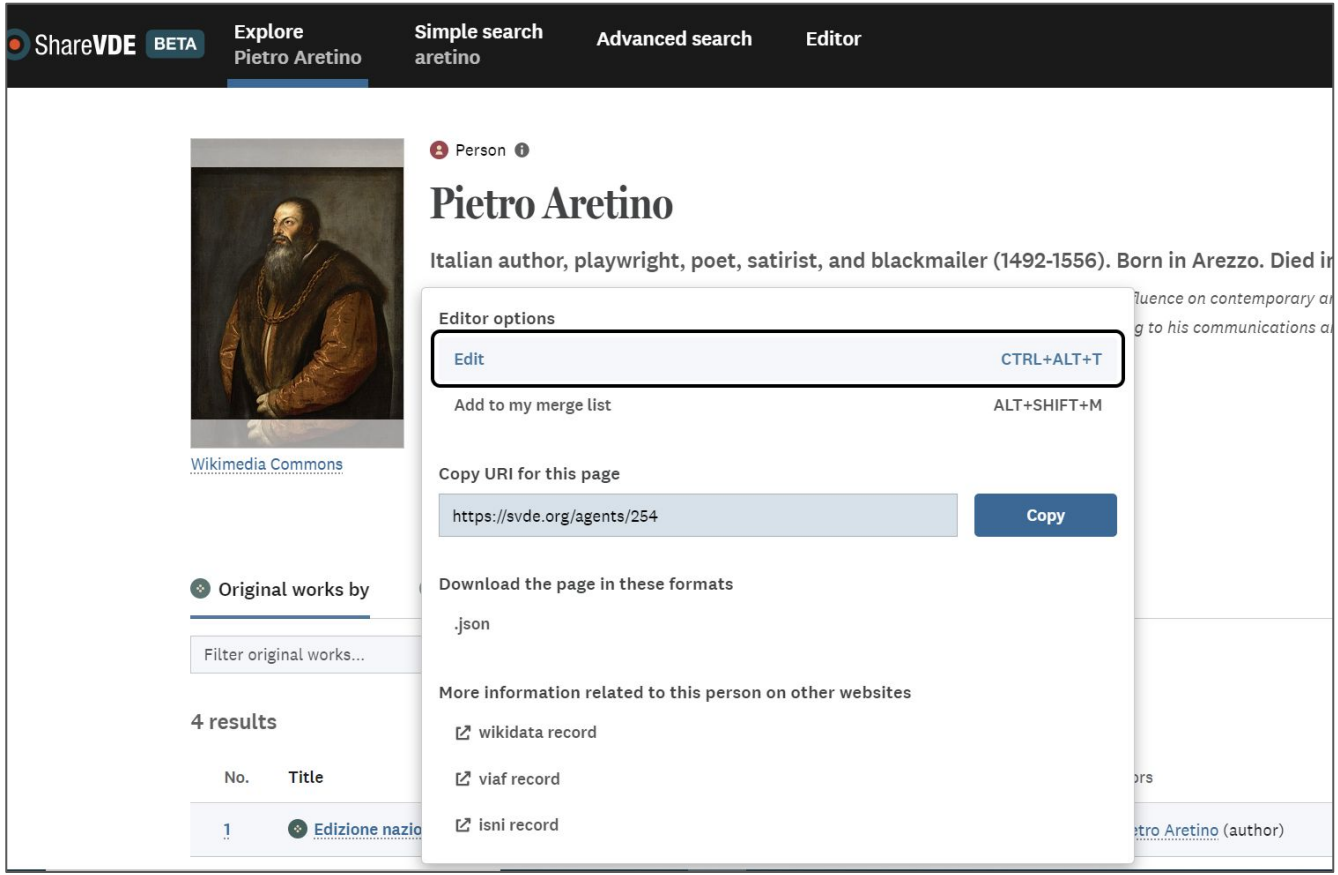
Focus on Authority services

Automatic services for Share Family libraries, piloted by Stanford University:

- validation of MARC 21 bibliographic records (correction of MARC 21 fields and obsolete forms, update of tags and subfields etc.);
- enrichment of MARC 21 fields with SVDE original URIs and URIs from external sources according to ad hoc profiling, including LCNAF, VIAF, ISNI;
- matching processes on external authority files (LCNAF, LCSH, LCGFT, FAST);
- import of authority records from external authority files (LCNAF, LCSH, LCGFT, FAST);
- reporting features providing complete details of the validation and corrections done to the records.

Next step developments: Authority Services fully integrated in the Linked Open Data environments.

Enhance data quality and authority control

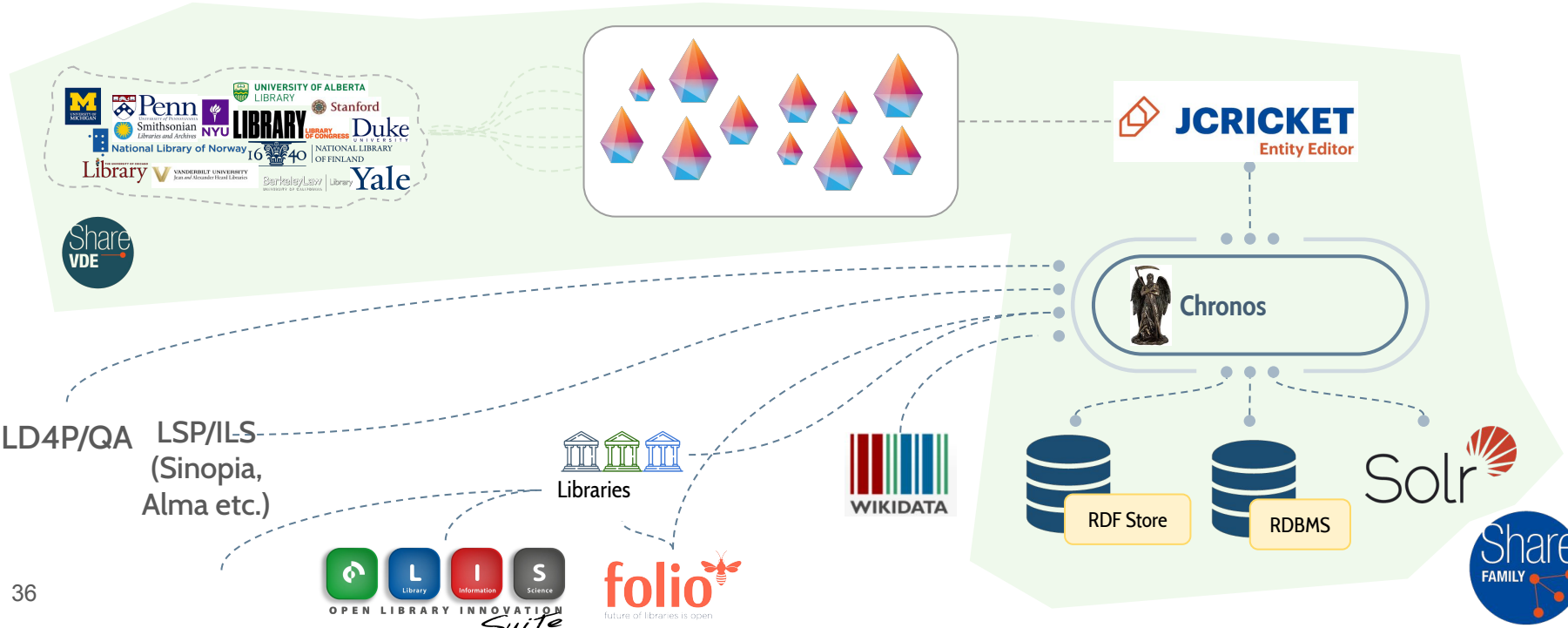


Third party integration - Outbound Connectors Architecture

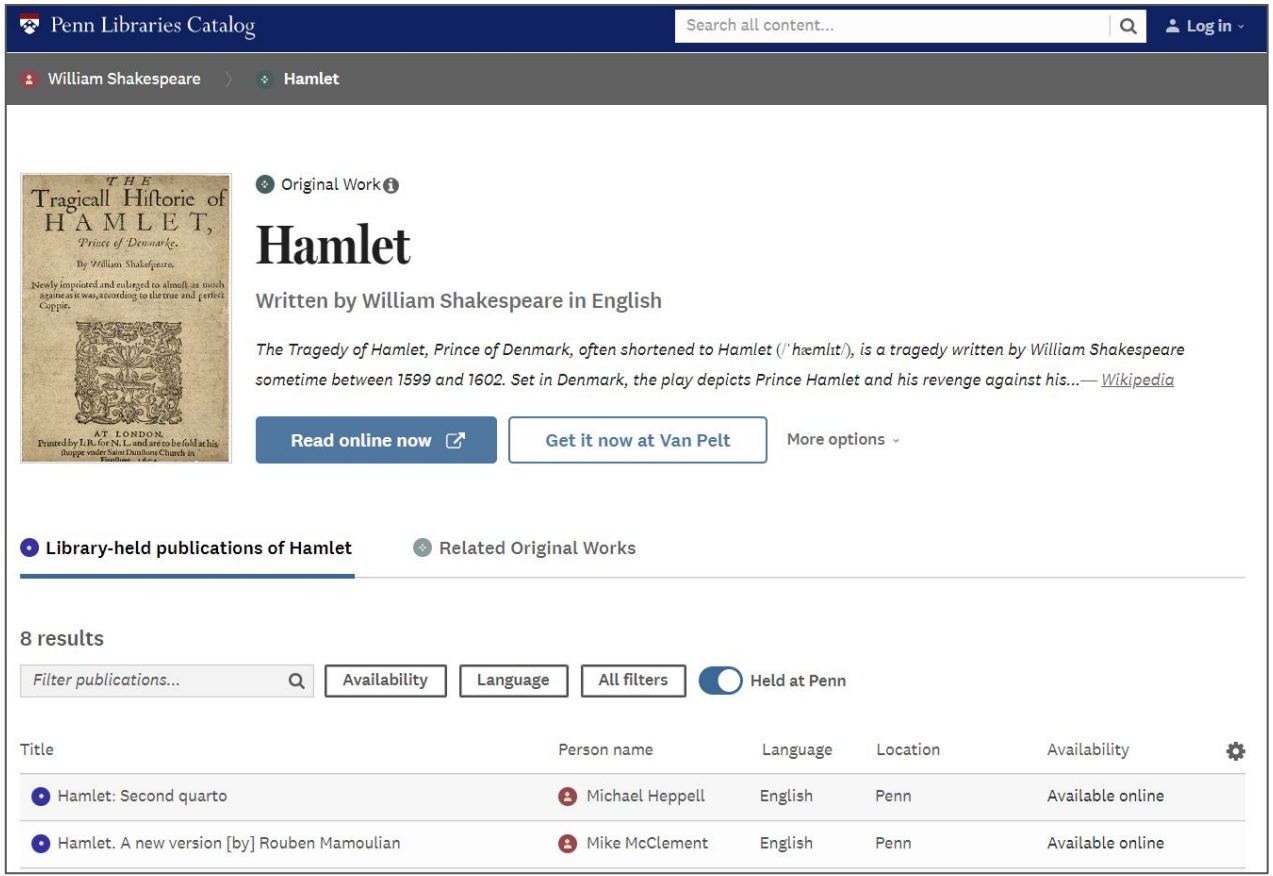
Data flows into Share-VDE from libraries, institutions and third-party sources (e.g. VIAF, ISNI, FAST)

The Share-VDE knowledge base (**Sapientia**) contains the integrated/clustered/enriched entities.

Data is mainly edited through JCricket, the Share-VDE entity editor.

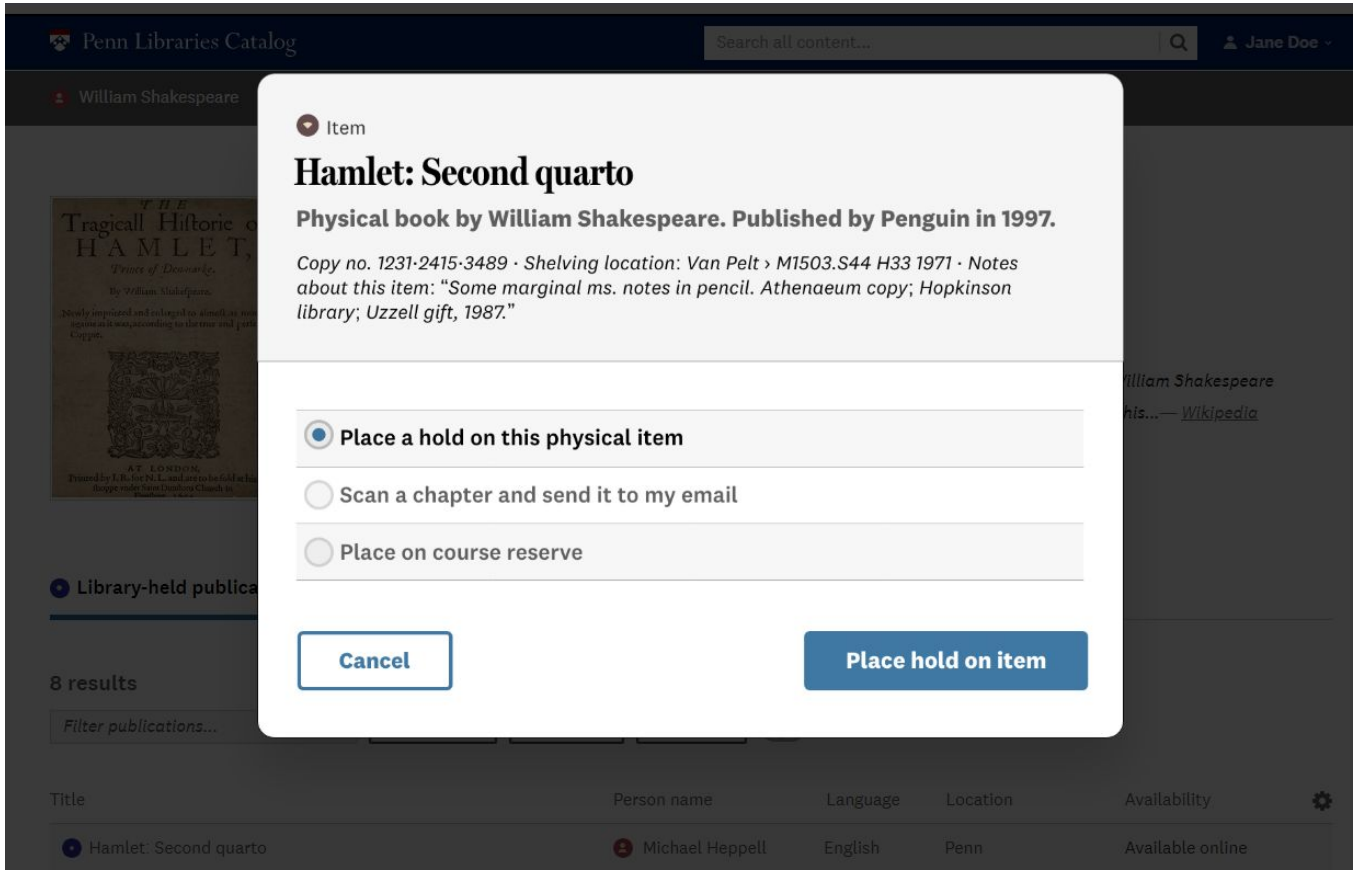


Integration with local services - circulation info



Integration with local services, e.g. connection to Alma APIs for [University of Pennsylvania circulation services]

Integration with local services - lending



SINOPIA integration: high-level milestones

✅ set-up the connector to fetch data from Sinopia

✅ ingested subset of Sinopia data from Stanford

🚧 now creating the parser so that RDF data coming from Sinopia can be clustered by Share-VDE processes

🎯 at the end of this process, Sinopia data will be included in the Share-VDE CKB - Cluster Knowledge Base

folio integration: high-level milestones

[See a possible model for ILS/LSP interaction through FOLIO]

Level 1: Instance correlation

- Folio inventory instances are retained in dedicated faces of Share-VDE prisms
- The inbound connector receives FOLIO data (instances) and feeds the Cluster Knowledge Base (CKB)
- The outbound connector communicates back data changes to FOLIO

Level 2a: Agents (and works) correlation

- Same interaction as above, but using authority records (agents, works), instead.

Level 2b: JCricket UI App in FOLIO

- Using the FOLIO built-in “pluggable” nature, the FOLIO UI SDK and the Share-VDE (GraphQL) API

JCRICKET

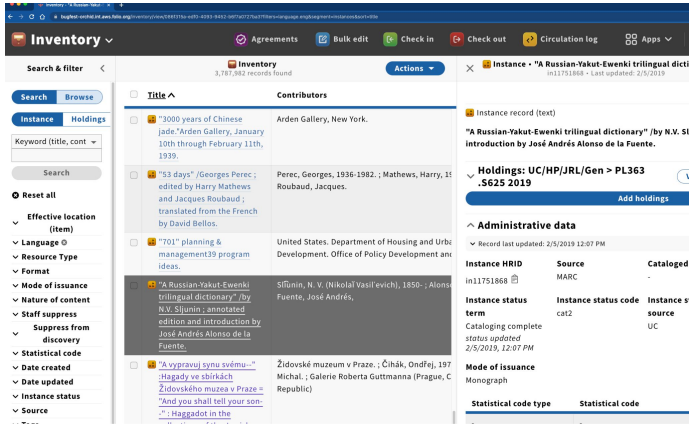
Entity Editor

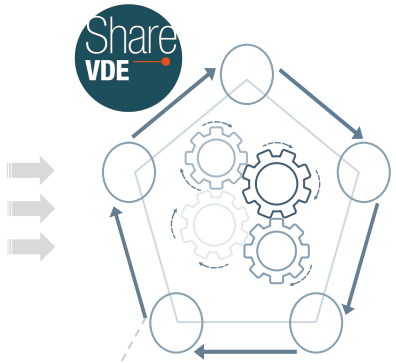
The Entity Management System

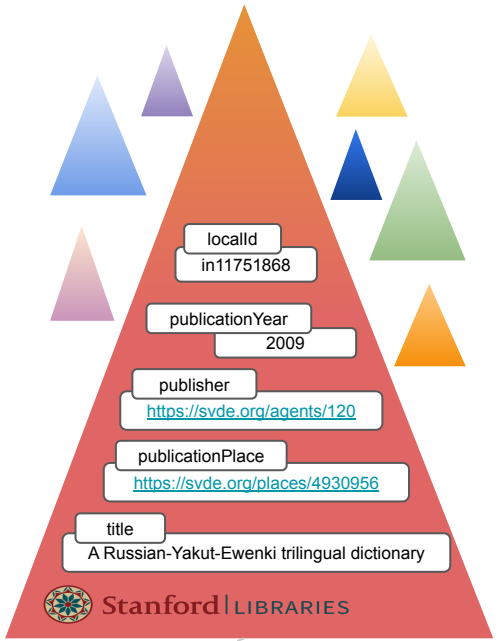
From Library Data to Share-VDE

A Share-VDE member (Stanford, in the example) uses FOLIO for managing its data.

Stanford | LIBRARIES





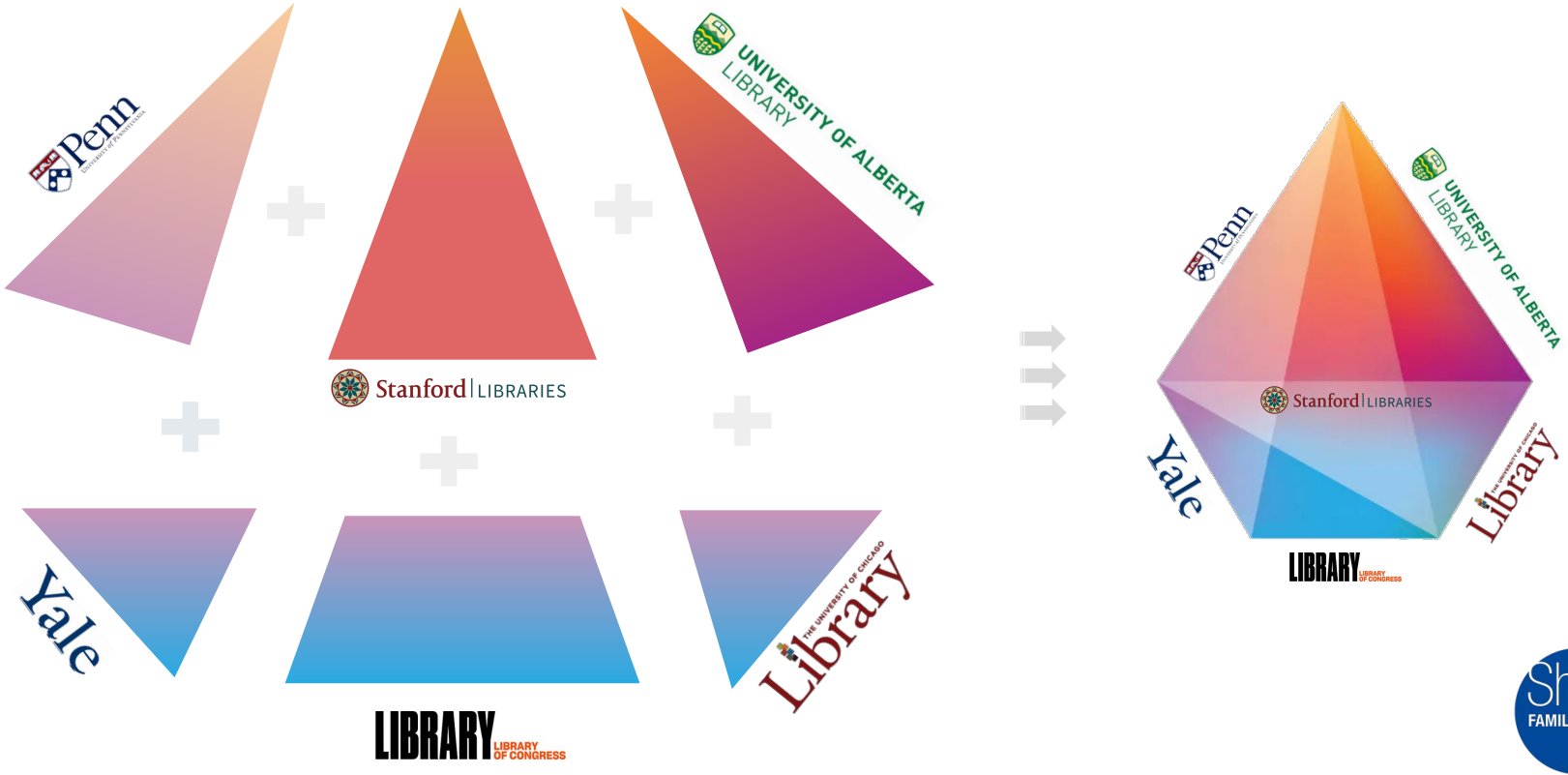


FOLIO instance (or instances in case of massive export) is sent to Share-VDE

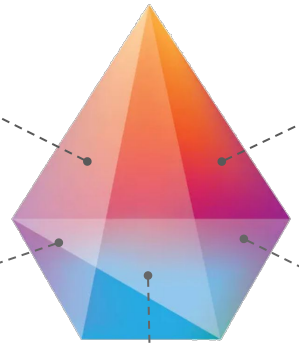
FOLIO instance data is split across the entities that form the Share-VDE domain model. In this example we focus on the properties that are assigned to a Share-VDE instance (red triangle above)

Share FAMILY

Prism, faces: the Share-VDE Entity



Faces (aka Contributions & Provenances)



UNIVERSITY OF ALBERTA LIBRARY

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

Stanford

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

LIBRARY OF CONGRESS

title	Alice in wonderland

National Library of Norway

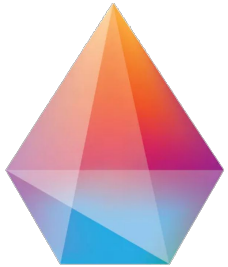
title	Alice's adventures under ground
titleAlternative	Journeys in Wonderland
author	https://svde.org/people/201

Share VDE **(links)**

sameAs	http://dbpedia.org/resource/Alice's_Adventures_in_Wonderland	Dbpedia
sameAs	https://www.wikidata.org/wiki/Q189875	Wikidata
sameAs	https://data.bnf.fr/ark:/12148/cb358500385#about	bnf

Share FAMILY

Properties: Attributes, Relationships, Links



Name	Value	Provenance
title	Alice in wonderland	LIBRARY Stanford
titleAlternative	Alice's adventures under ground	LIBRARY
titleAlternative	Journeys in Wonderland	National Library of Norway

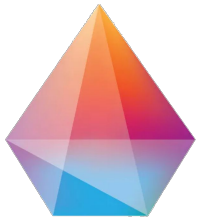
An attribute is a data property, having a literal as value

Share VDE		
sameAs	http://dbpedia.org/resource/Alice's_Adventures_in_Wonderland	Dbpedia
sameAs	https://www.wikidata.org/wiki/Q189875	Wikidata
sameAs	https://data.bnf.fr/ark:/12148/cb358500385#about	bnf

A link is a connection between a Share-VDE Prism and an external reference

Name	Provenance
author	LIBRARY Stanford

Name	Value	Provenance
name	Carroll, Lewis	LIBRARY Stanford
nameAlternative	Dodgson, Charles Lutwidge	LIBRARY Stanford
nameAlternative	Karol, Luis	National Library of Norway



A relationship is a connection between two Share-VDE Prisms

The Big Picture: Genesis, Search, Edit

Data flows into Share-VDE from libraries, institutions and third-party sources (e.g. VIAF, ISNI, FAST)

The Share-VDE knowledge base (**Sapientia**) contains the integrated/clustered/enriched entities.

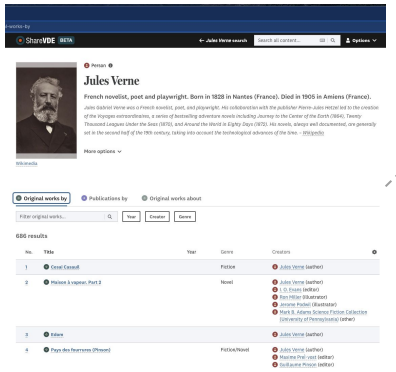
Edit API (GraphQL)

Data is mainly edited through JCricket, the Share-VDE entity editor.

JCRICKET
Entity Editor

but...

Search API (GraphQL / REST)



Third-party Applications

Any third-party, authorized application can be a Share-VDE client

but...

Data is searchable through the entity discovery portal.

Share FAMILY

JCricket: Available Operations

Edit: a property is added/updated/deleted

~~Lewisss Carroll~~ → Lewiss Carroll

is author of ~~https://svde.org/opuses/1827349~~ → https://svde.org/opuses/920302

Invalidate

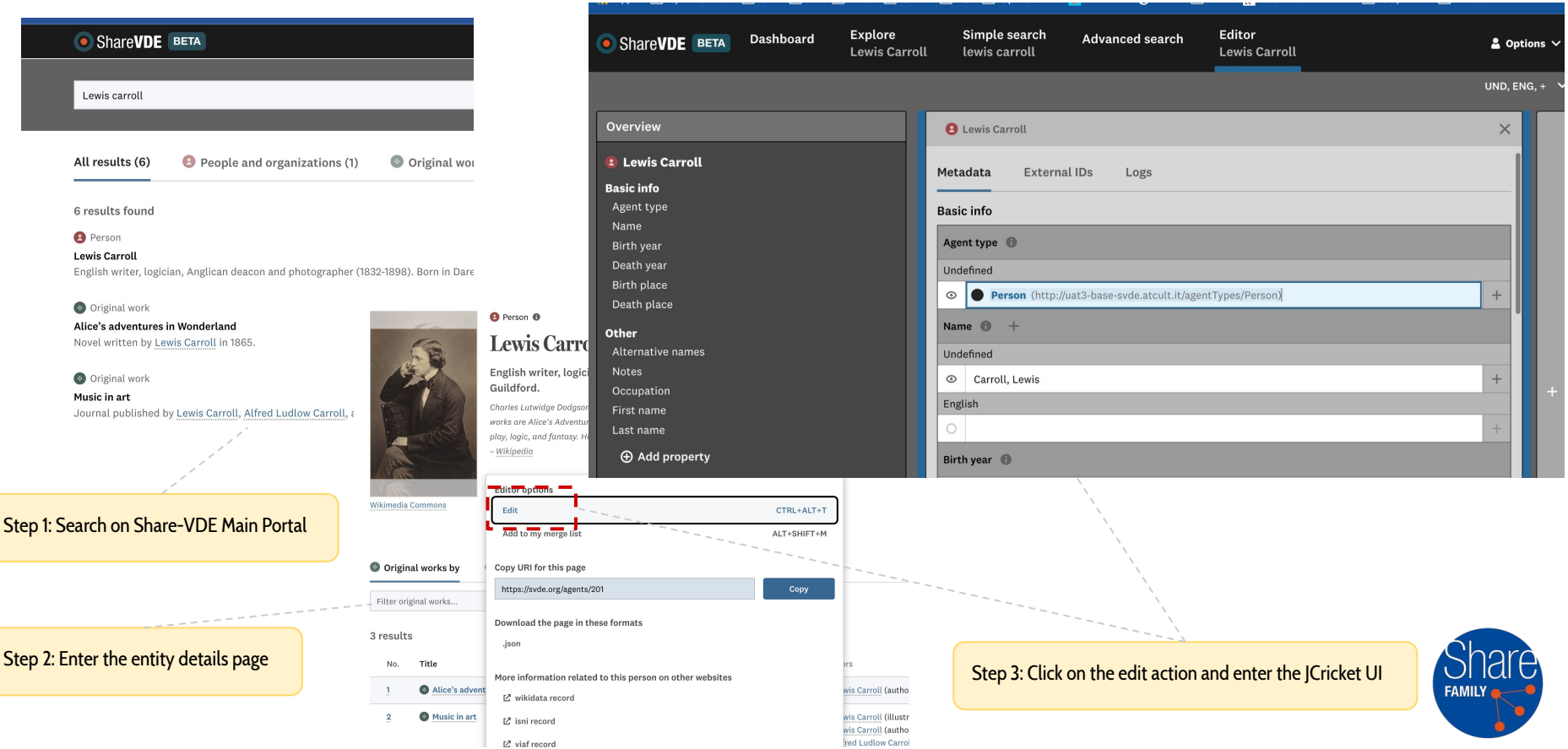
Merge: multiple prisms are merged into one

For example, two prisms, "*Mark Twain"* and "*Samuel Clemens",* should be actually part of the same entity.

Split: a prism is split into multiple prisms

A prism (wrongly) contains information belonging to multiple entities (e.g., *"Wallace David"* and *"David Wallace"*)

JCricket user interface



Step 1: Search on Share-VDE Main Portal

Step 2: Enter the entity details page

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

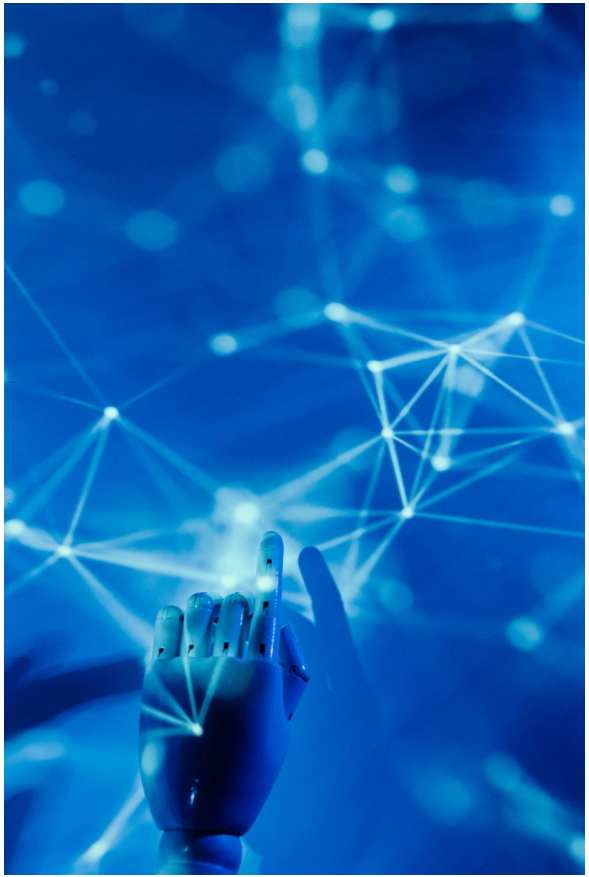
What JCricket *is*

- ✅ it's a linked data entity / authority editor
- ✅ it applies to linked data entities created within all tenants of the Share Family (svde.org, pcc-lod.org, natbib-lod.org)
- ✅ it's a manual application that manages properties (attributes, relations and links) of entities in the CKB - Cluster Knowledge Base
- ✅ it's a collaborative tool shared across member institutions
- ✅ it can be a new tool for entity sharing in LOD

What JCricket ***is not***

- ❌ not a traditional bibliographic data editor
- ❌ not an original cataloguing tool
- ❌ not in contrast with Sinopia or Marva
- ❌ not impacting original data that reside in member libraries' systems (unless libraries want to use ad hoc APIs for entity updates both in SVDE and in their systems)

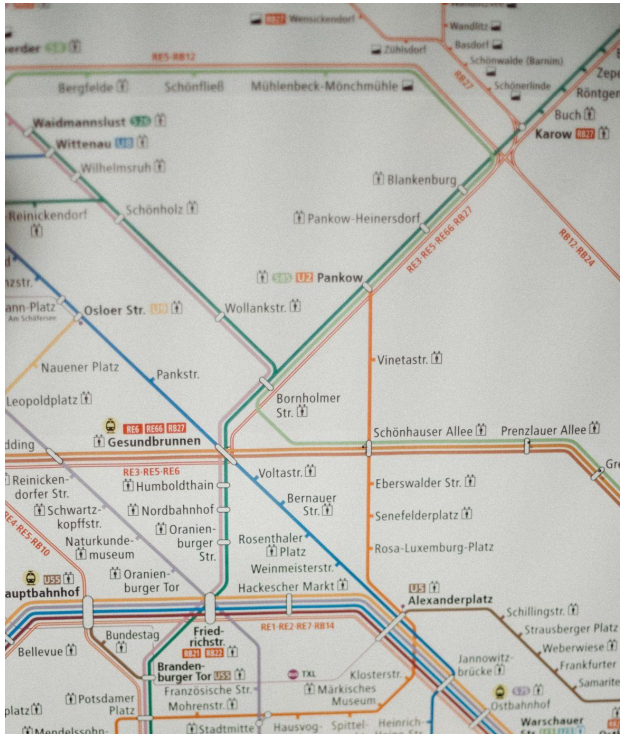
Next generation cataloguing



The JCricket editor is an example of how the LOD Platform technology, within the Share Family Linked Data Ecosystem, is pursuing a new way of managing library cataloguing in a cooperative way:

- ★ aggregation of data from multiple sources
- ★ managed through standard protocols (linked data)
- ★ in a collaborative and integrated environment
- ★ that makes available open data and resources
- ★ to end users and professionals (researchers, scholars etc.)
- ★ for reuse in the library community and beyond

Where we are now



★ The back-end APIs that manage JCricket behind the scenes are ready ✅

★ The respective front-end functions for the end users to actually use JCricket are under development ✍

JCricket references

Useful references:

- JCricket overview
  https://wiki.share-vde.org/w/images/7/74/JCricket_overview_-_2023-Jan-26.pdf
- for more technical details on JCricket
  https://wiki.share-vde.org/w/images/e/e8/JCricket_entity_editor_presentation.pdf
- on how JCricket has been conceived
  https://wiki.share-vde.org/w/images/b/b3/Share-VDE_perspective_on_Cluster_Knowledge_Base_and_Provenance.pdf

See the live demos!

JCricket premiered its demo at the ALA Conference 2023, during the Share-VDE Workshop:

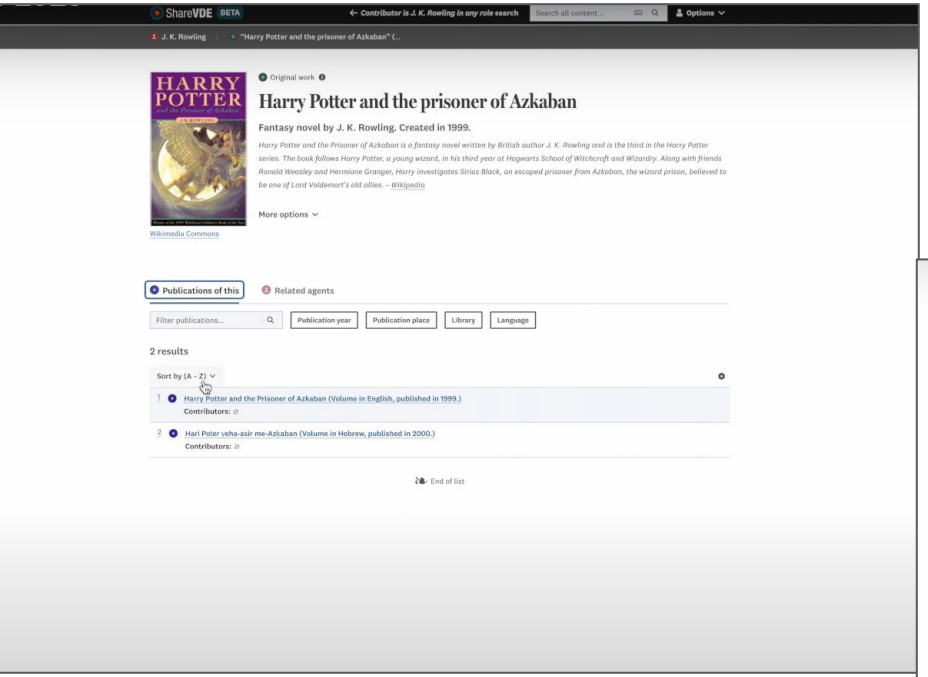
https://bit.ly/SVDE_Workshop2023_recording

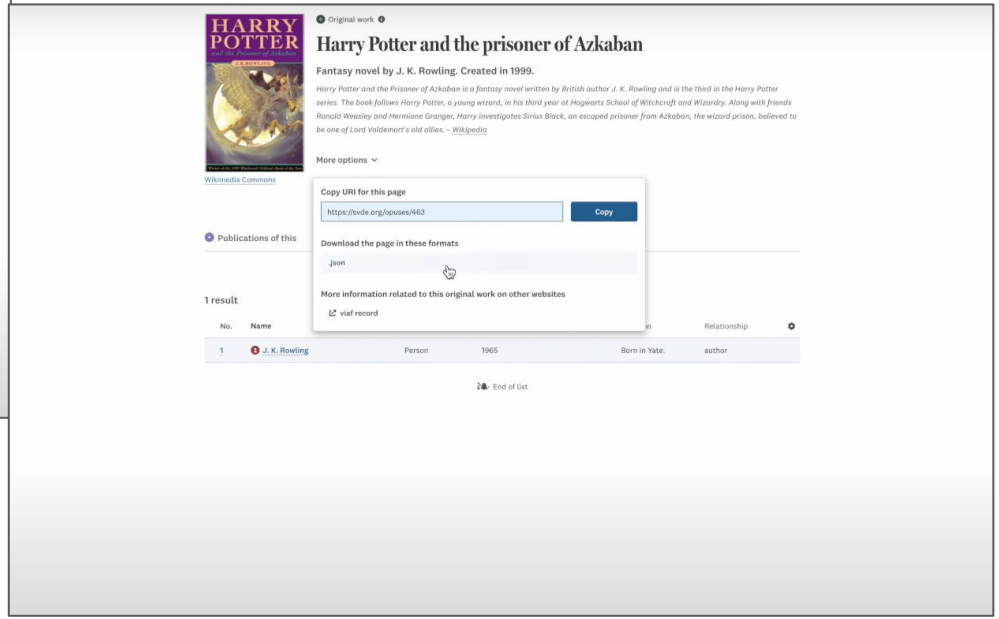
JCricket demo at the LD4 Conference 2023:
https://www.youtube.com/watch?v=wbrqvWGnvfI

Share-VDE discovery portal general demo: https://bit.ly/SVDE-discovery-live-demo

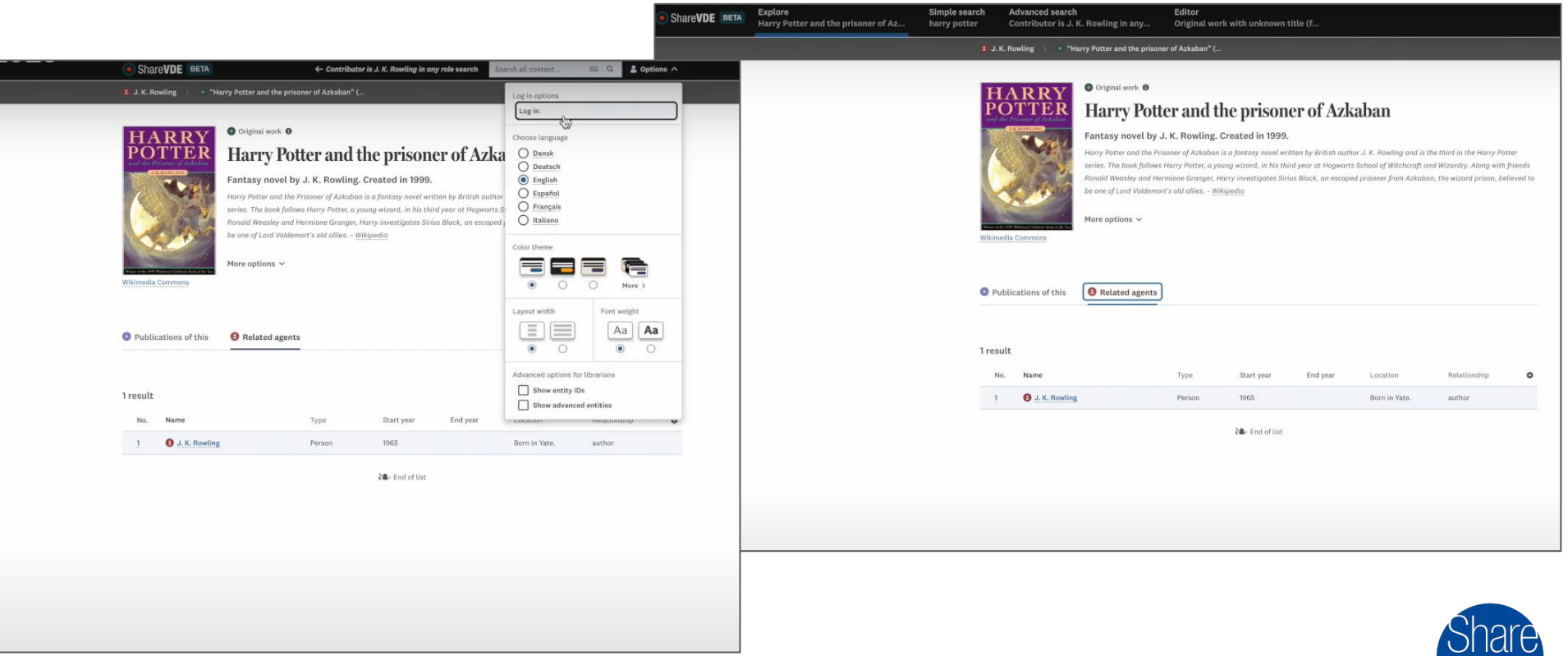
JCricket Editor - examples from the user interface

JCricket features - The user interface

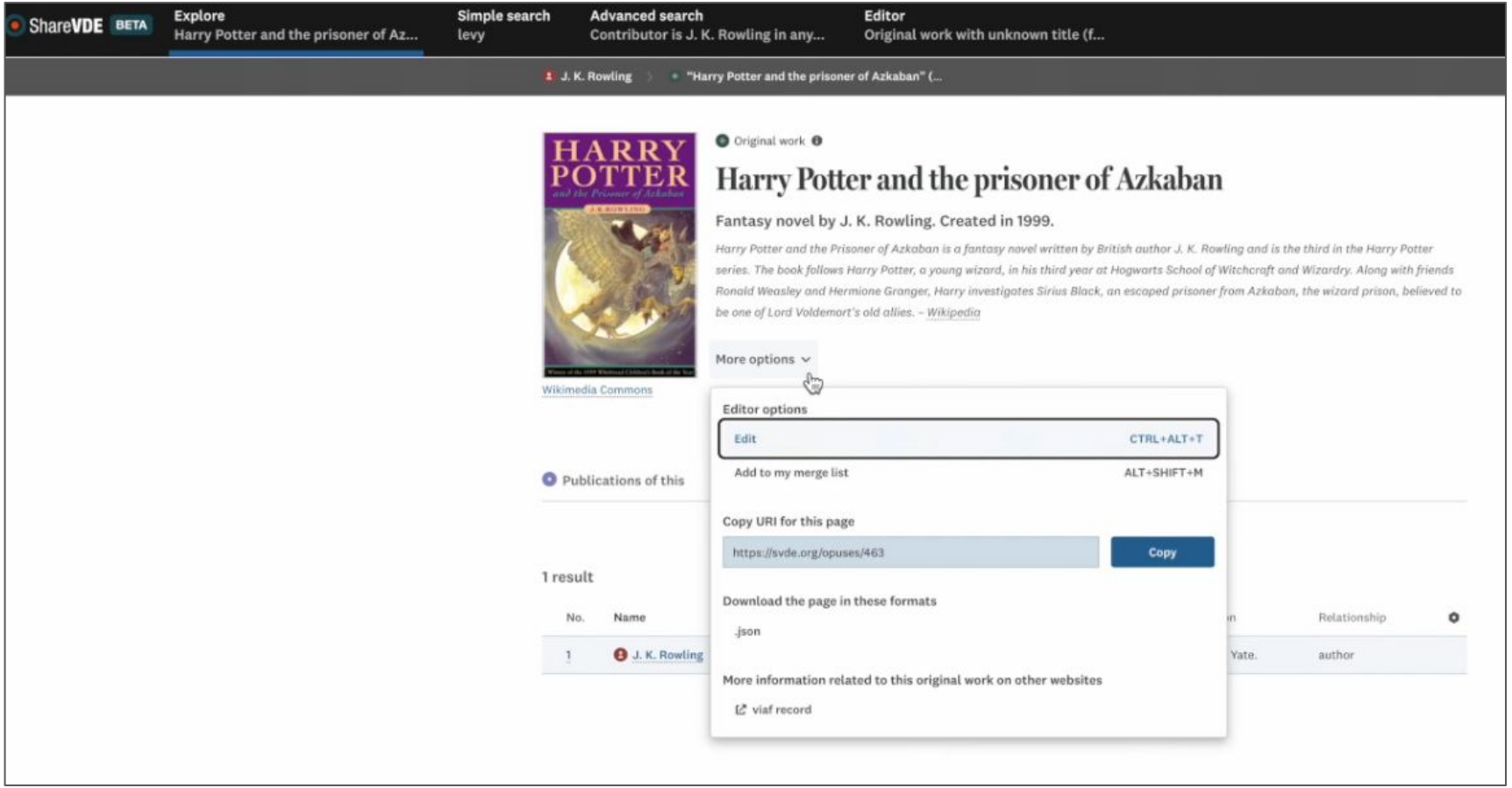




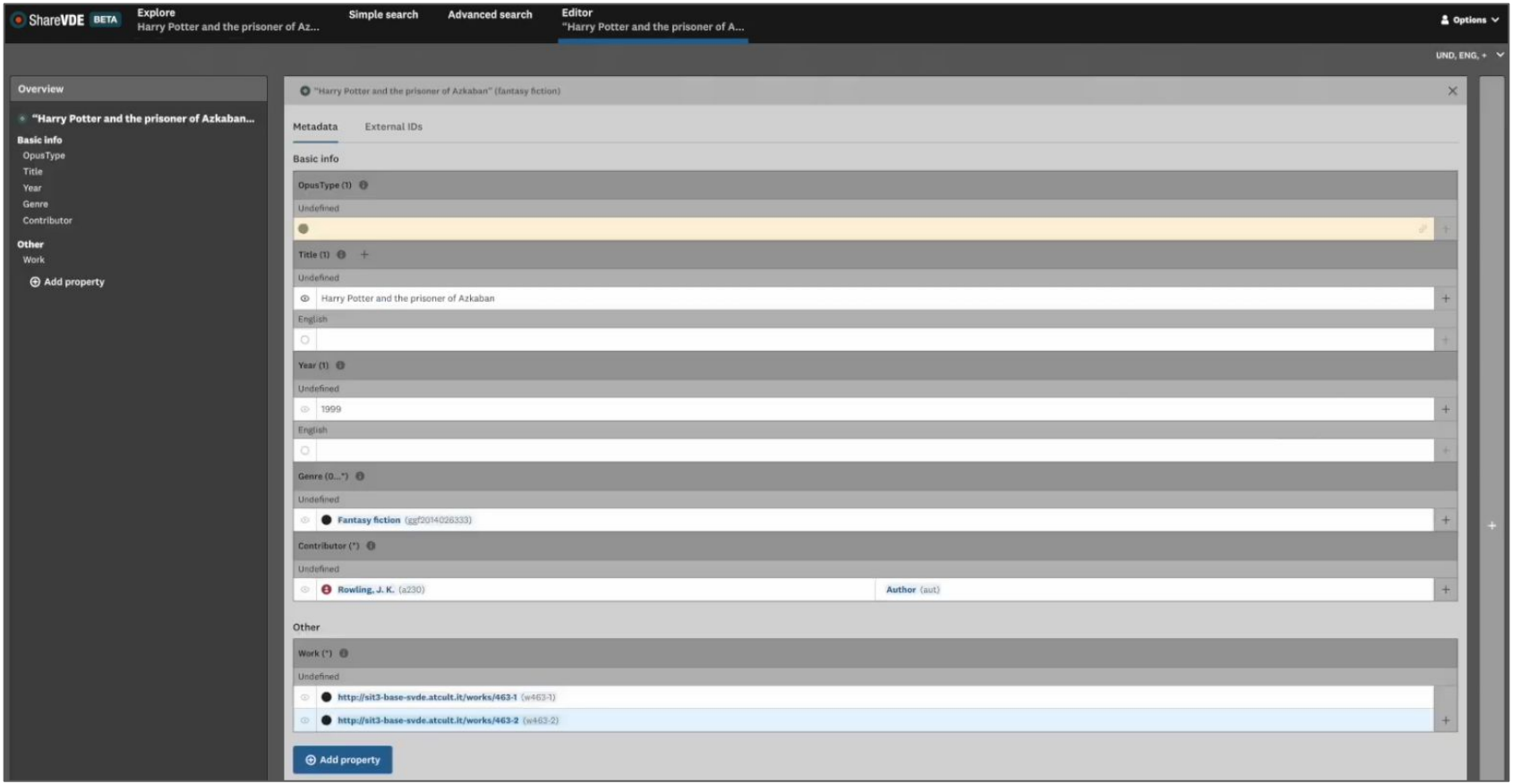
JCricket log-in



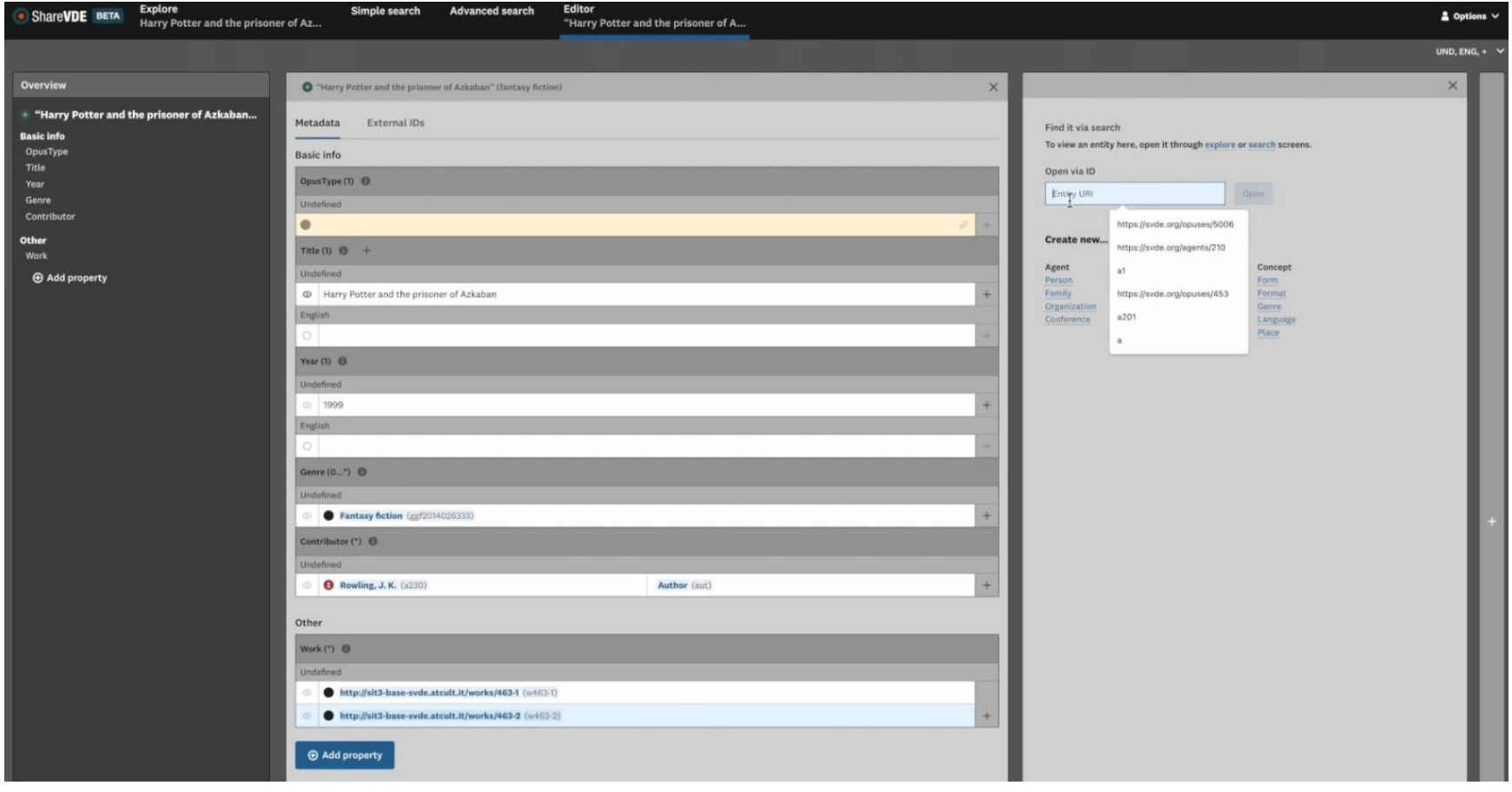
JCricket feature selection



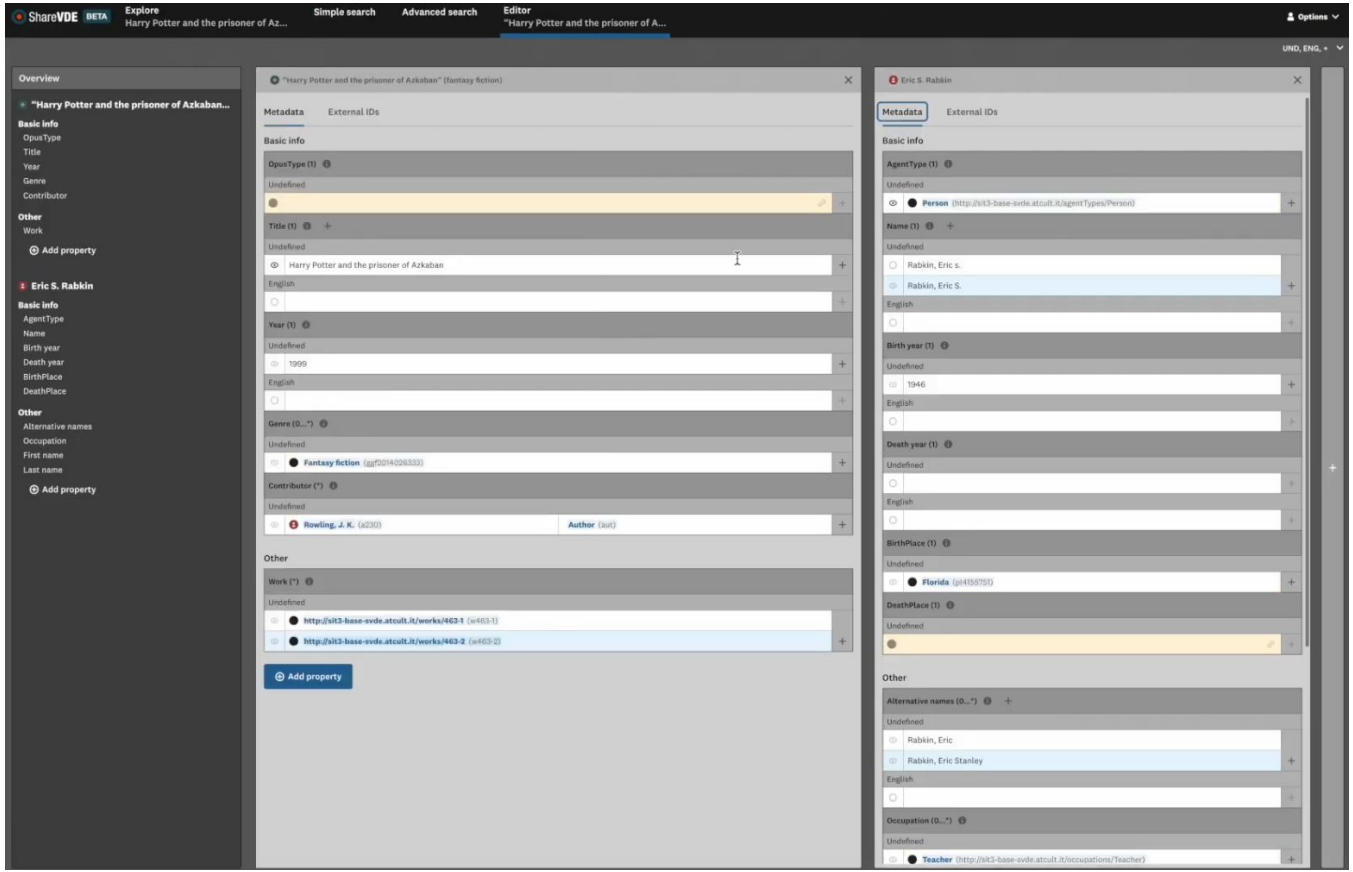
JCricket edit



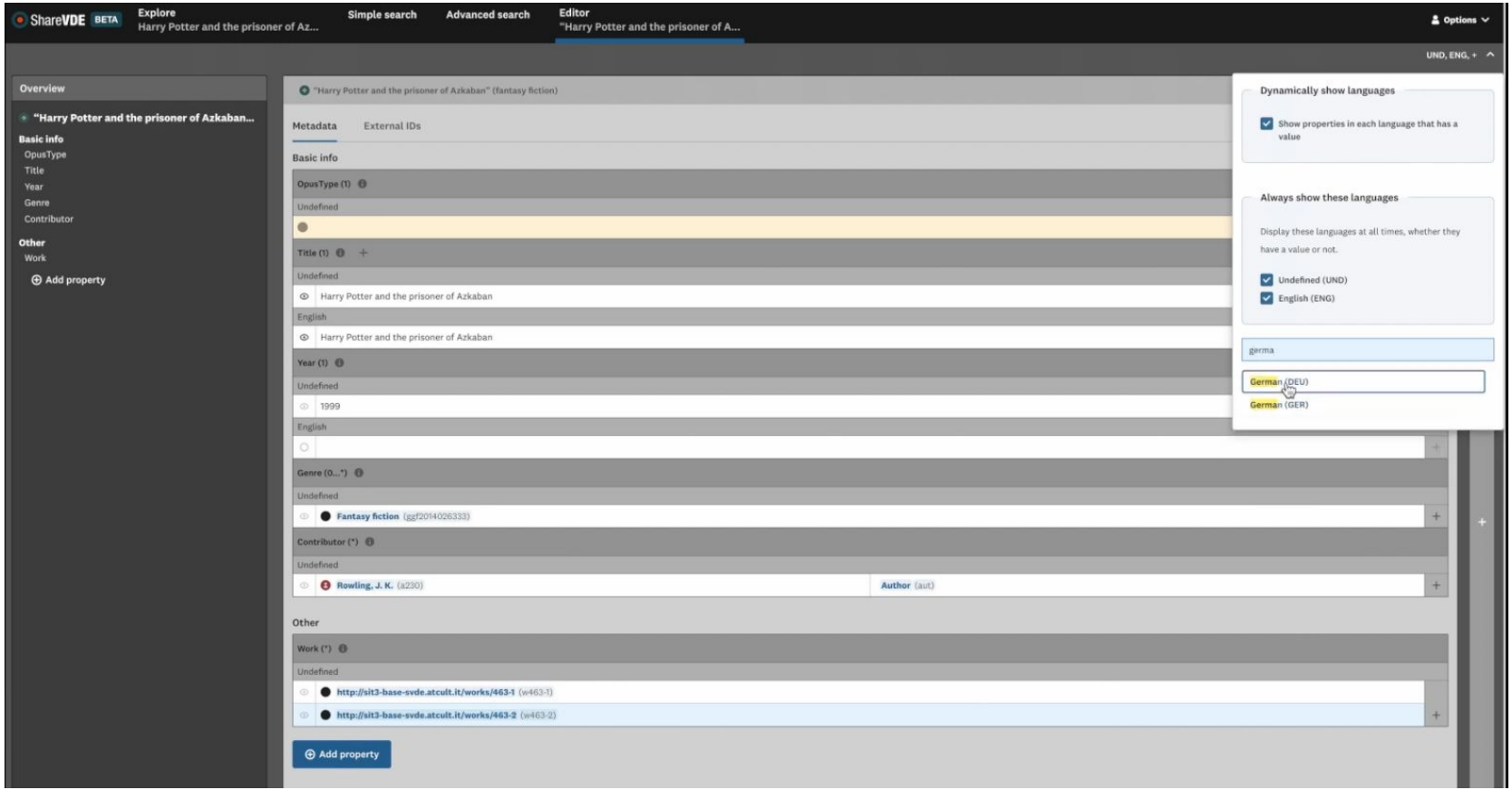
JCricket edit - open a new entity via ID

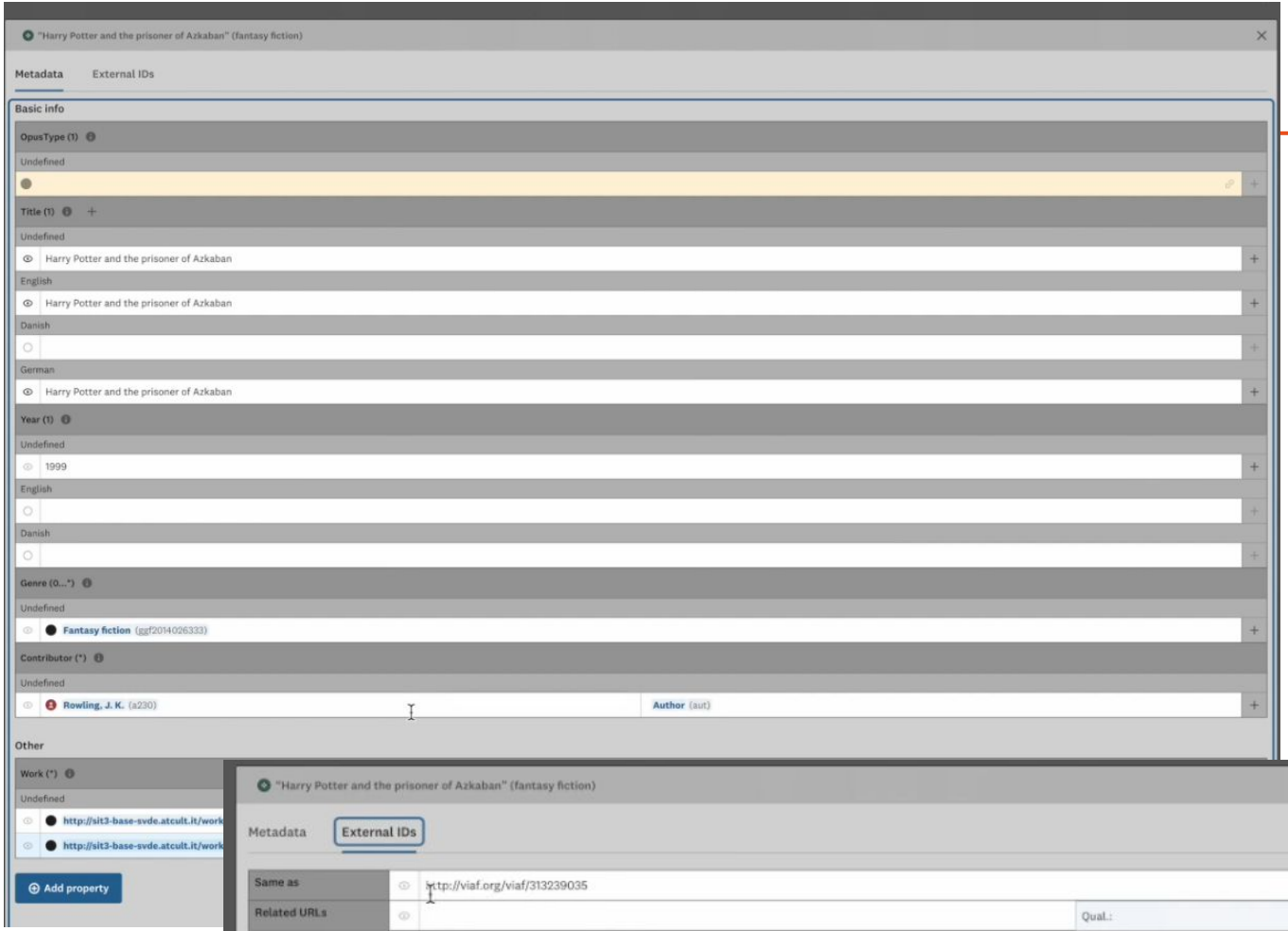


JCricket edit - Multiple entities in one screen



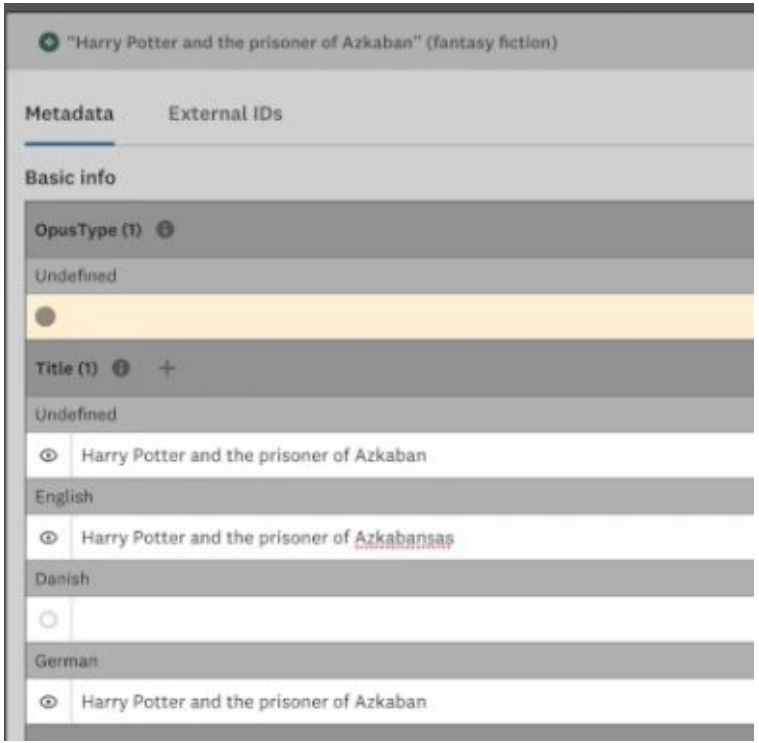
JCricket edit - languages

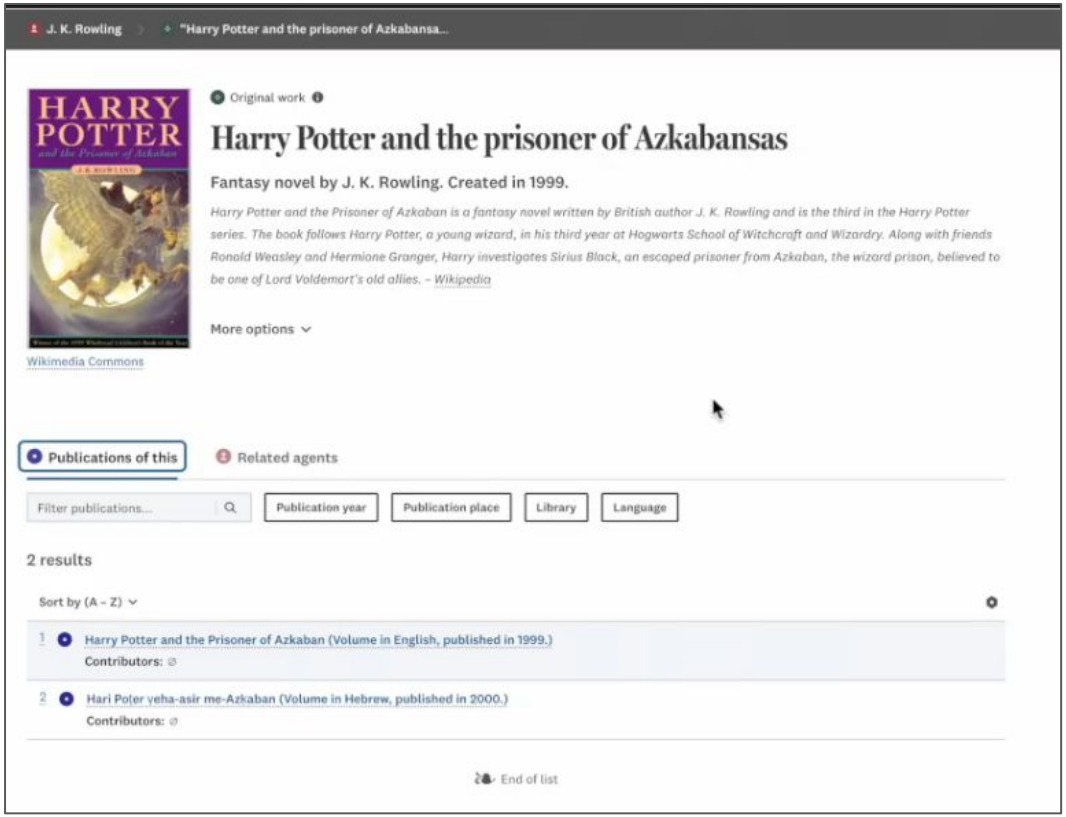




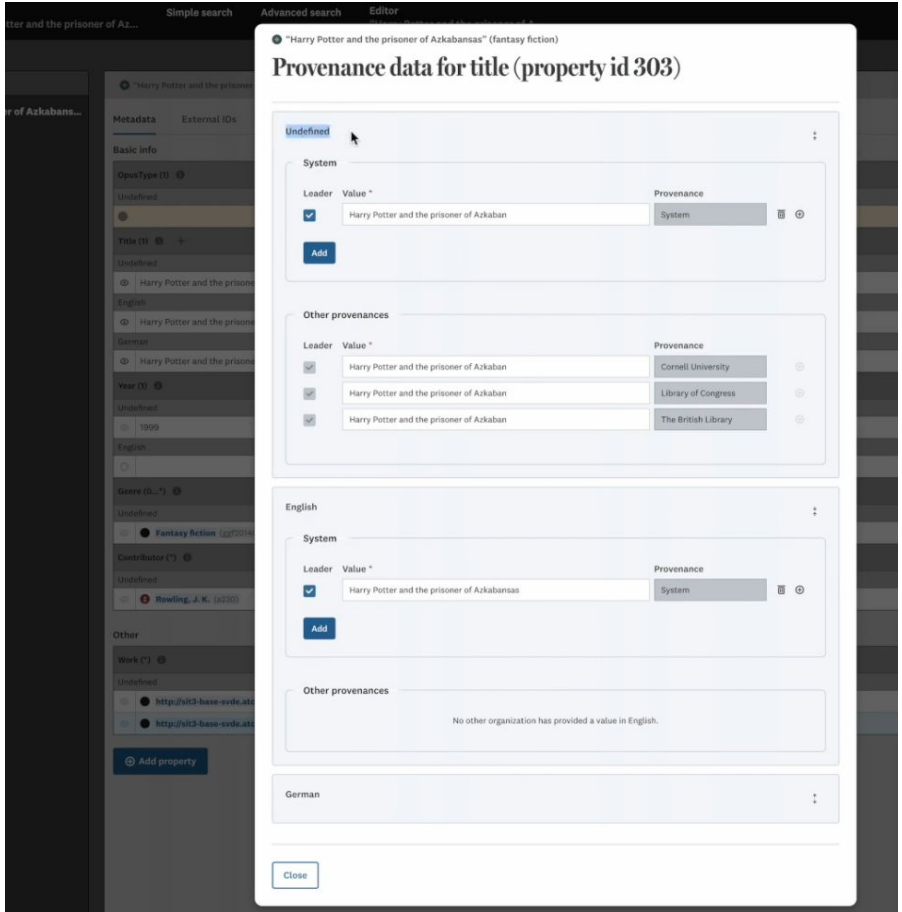
Properties: Attributes, Relationships, Links

JCricket edit - Add variant forms

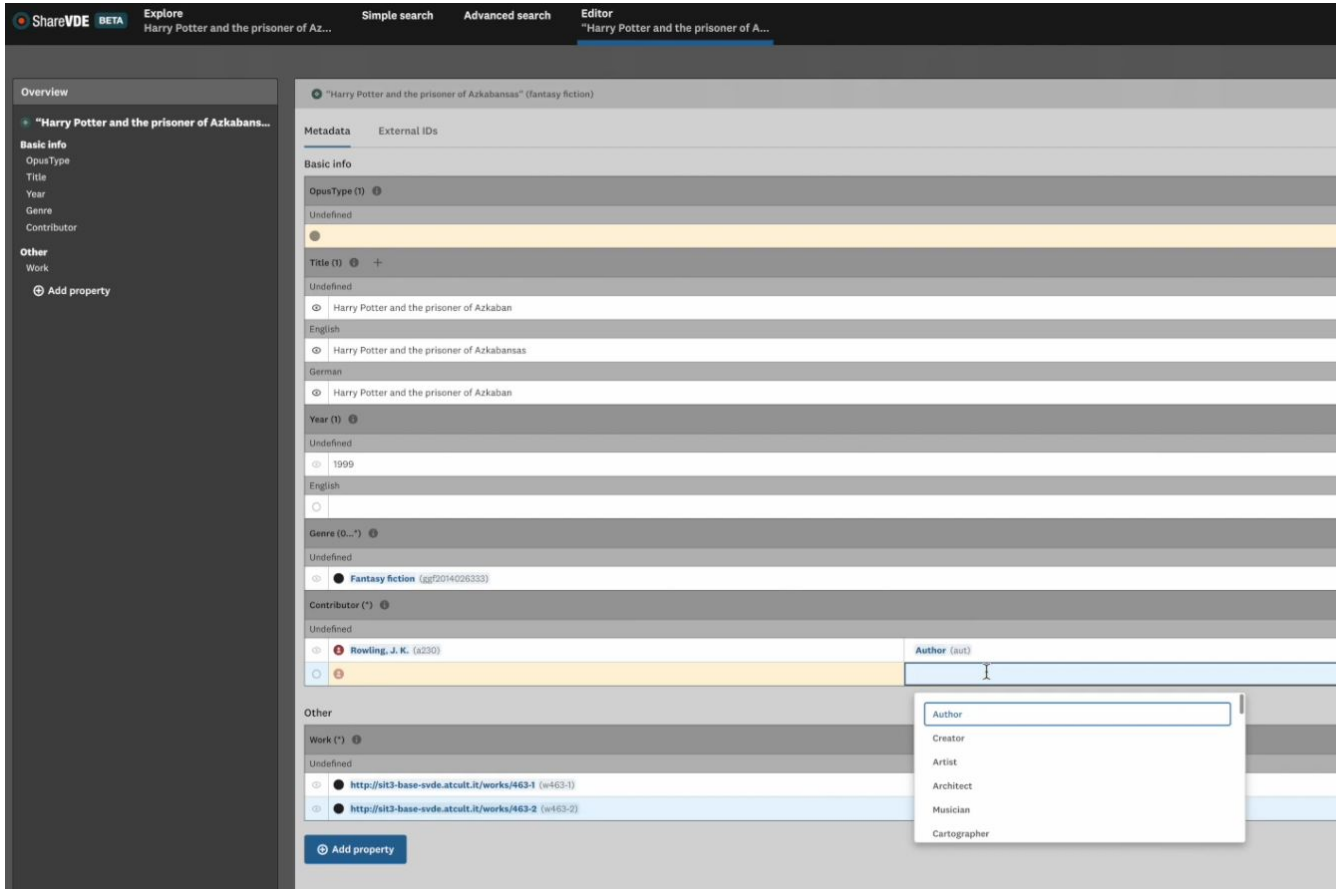




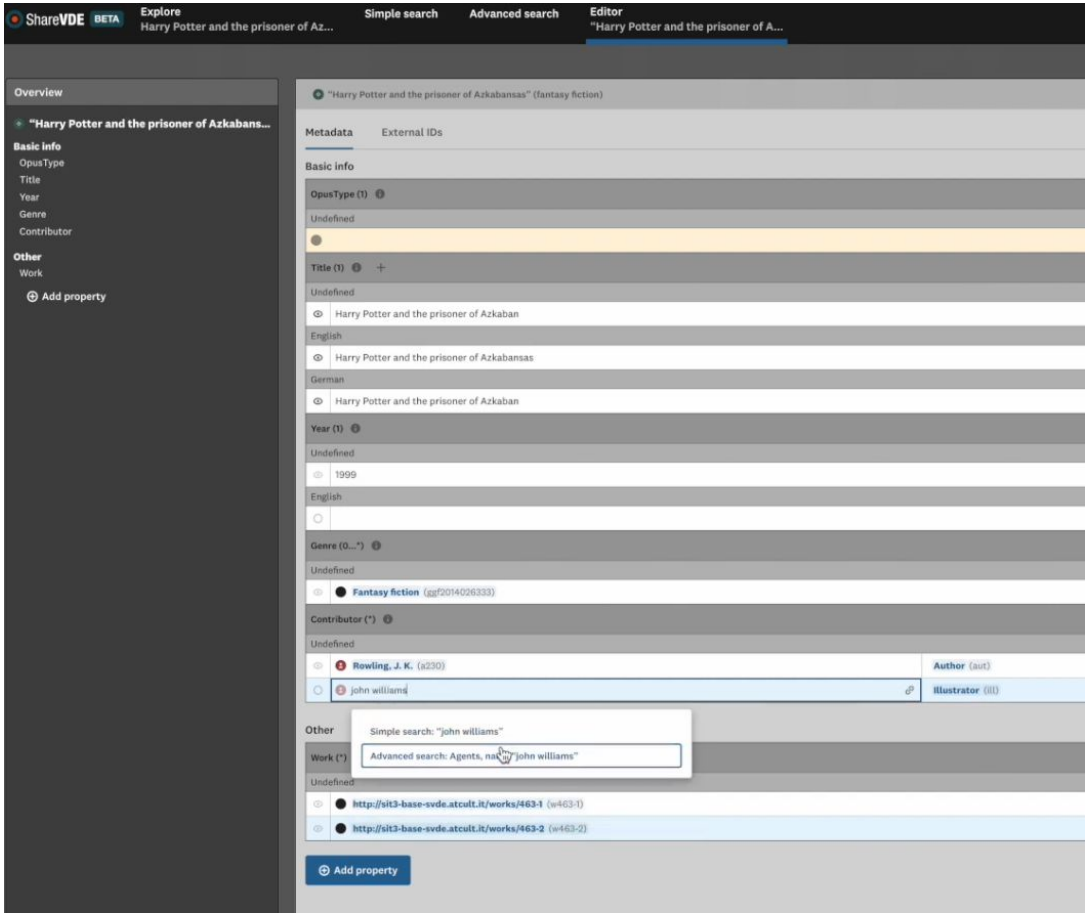
Provenances and leader value for end users



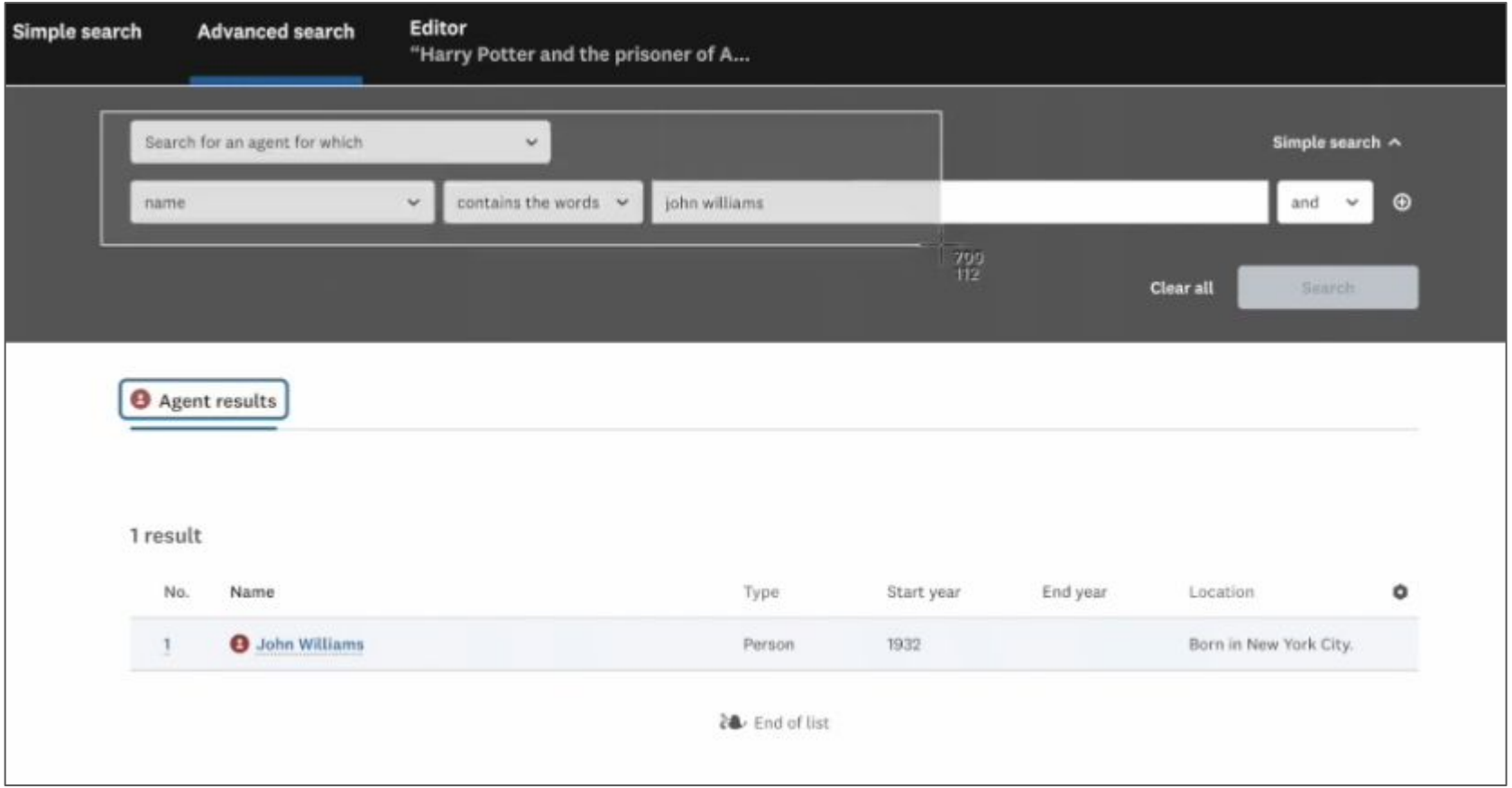
JCricket edit - controlled value list



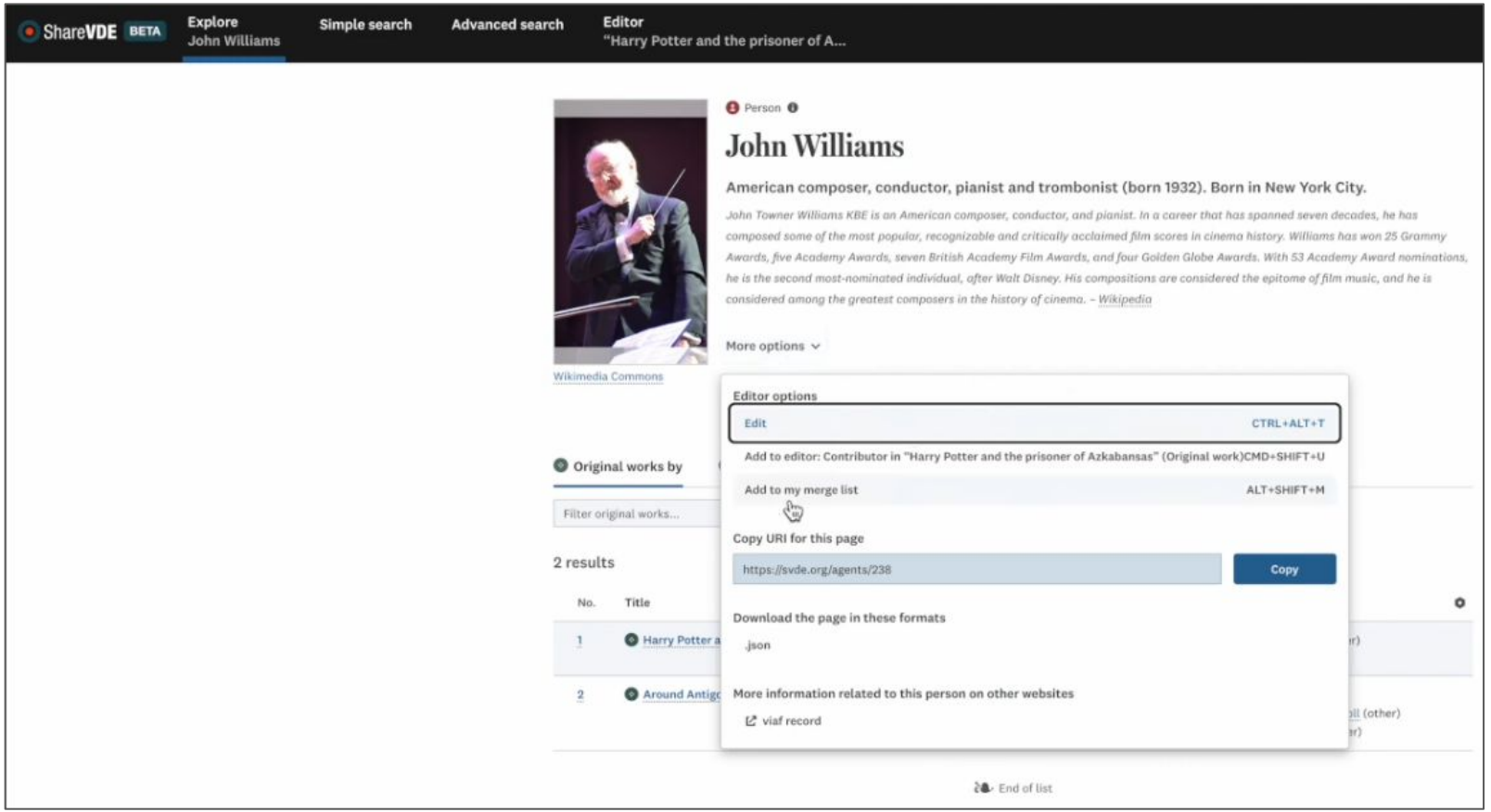
JCricket edit - search while editing



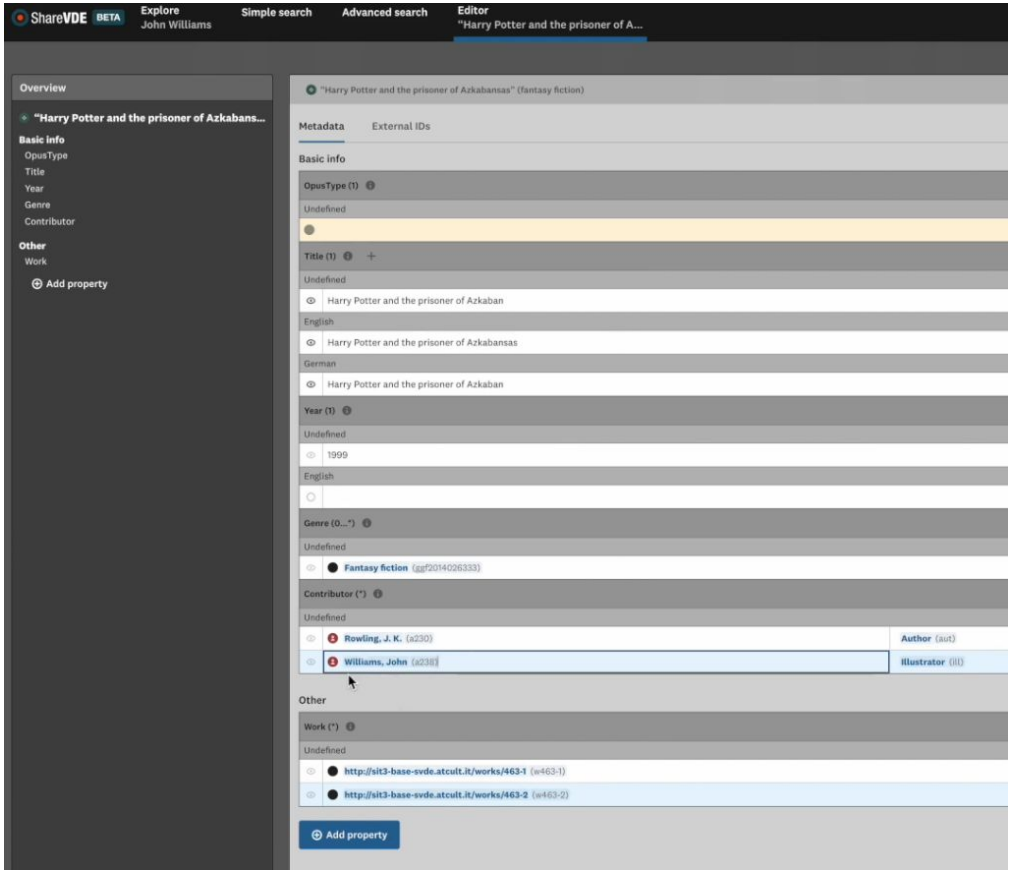
JCricket edit - search while editing



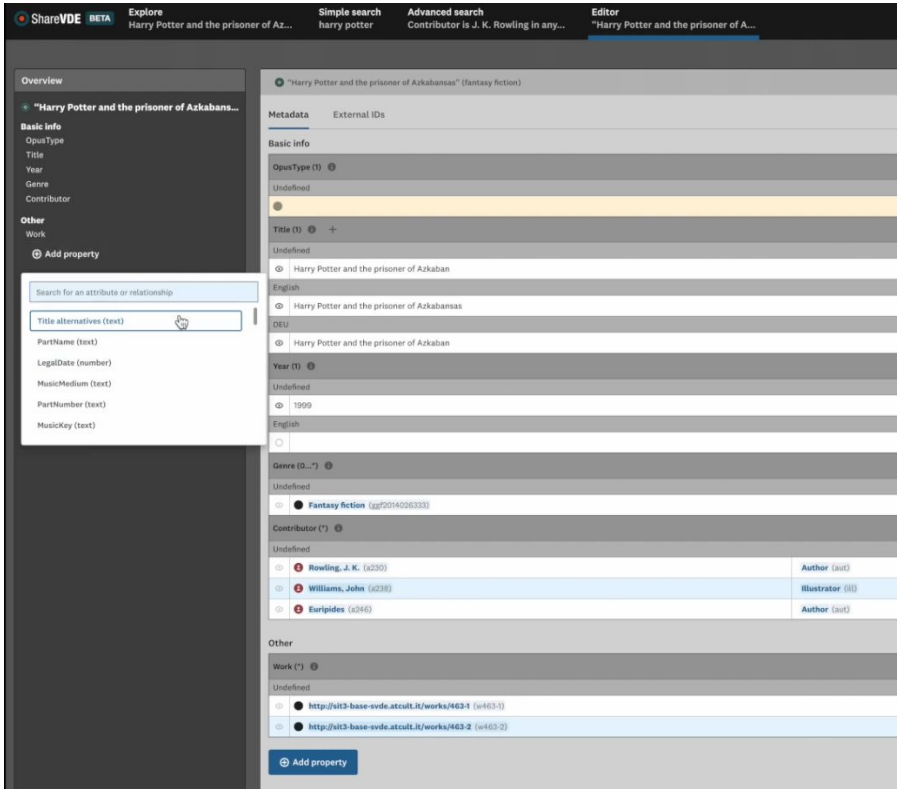
JCricket edit - search while editing

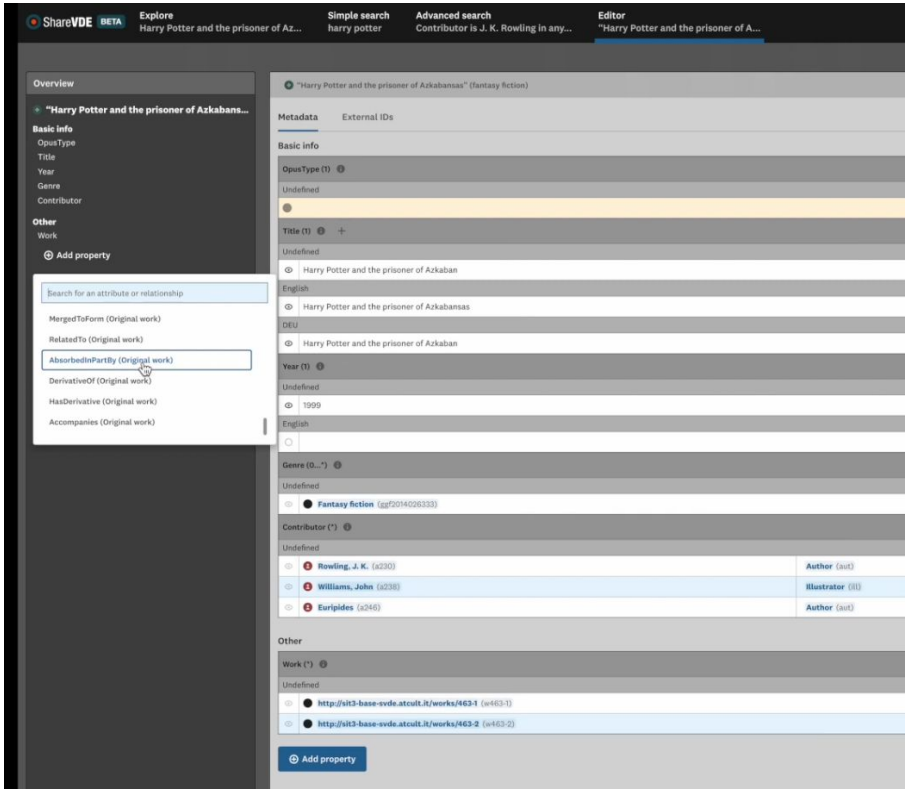


JCricket edit - add agent

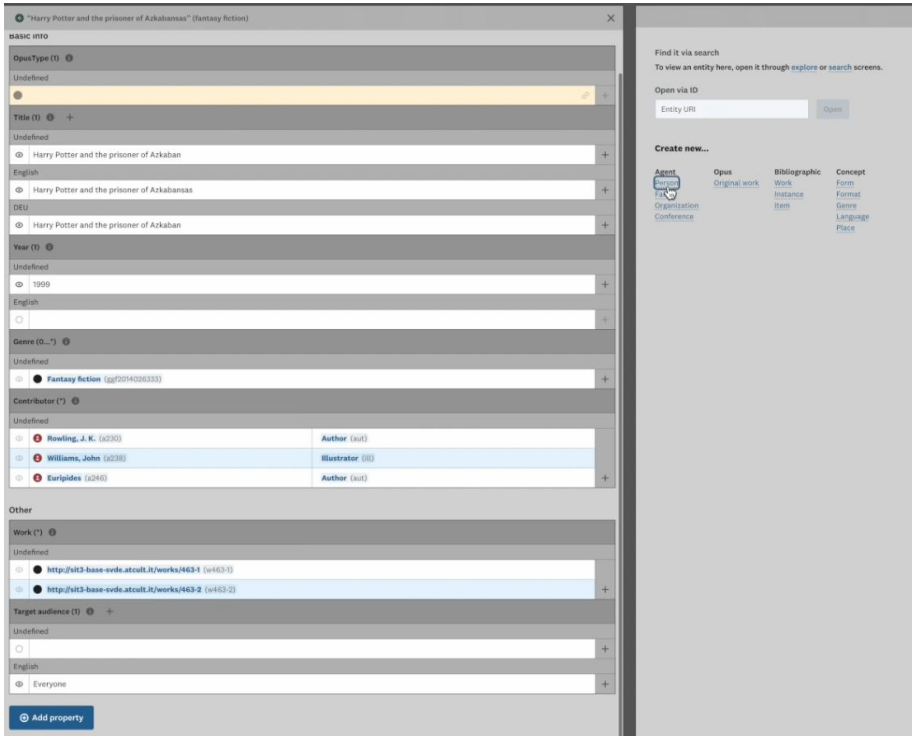


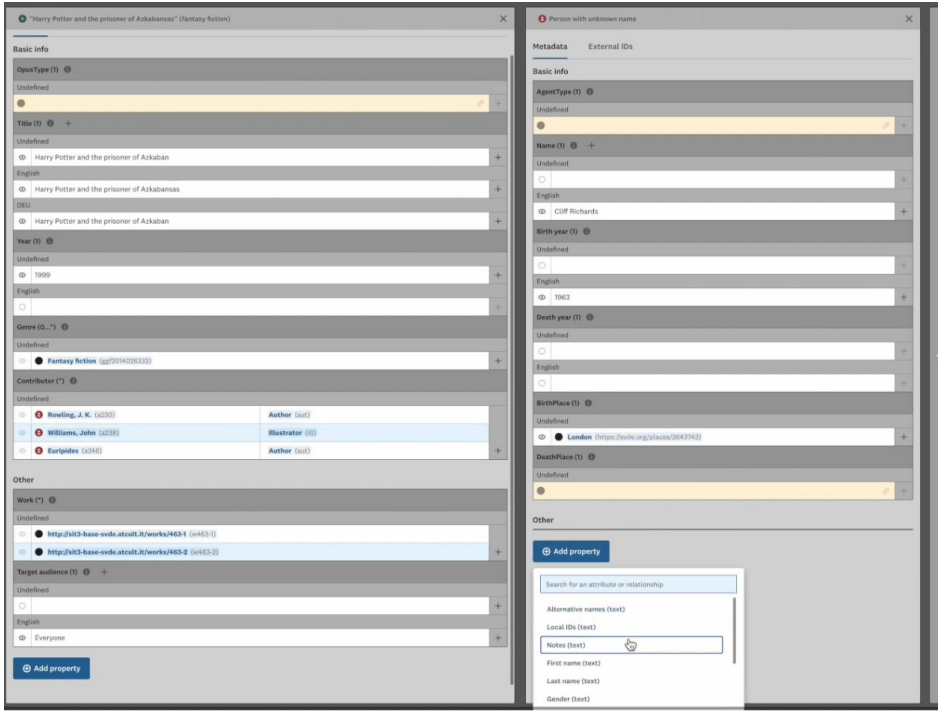
JCricket edit - add attribute



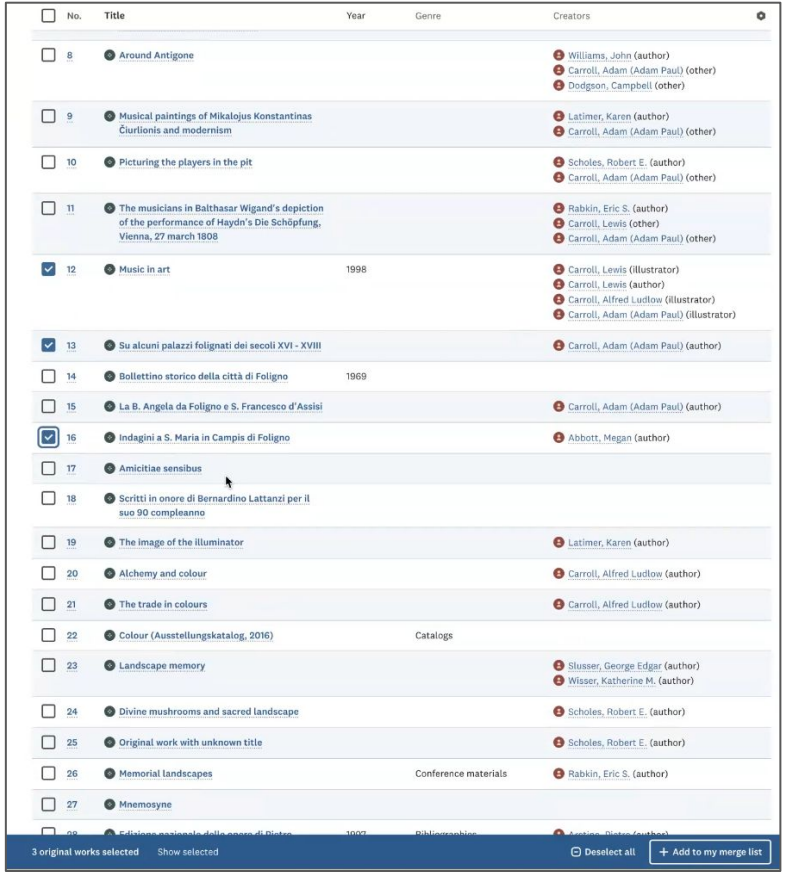


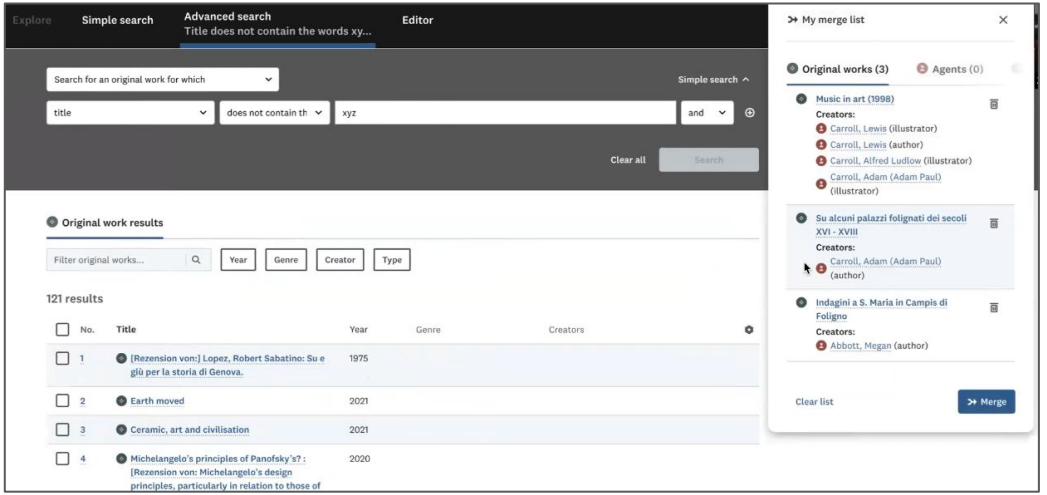
JCricket - create an entity from scratch



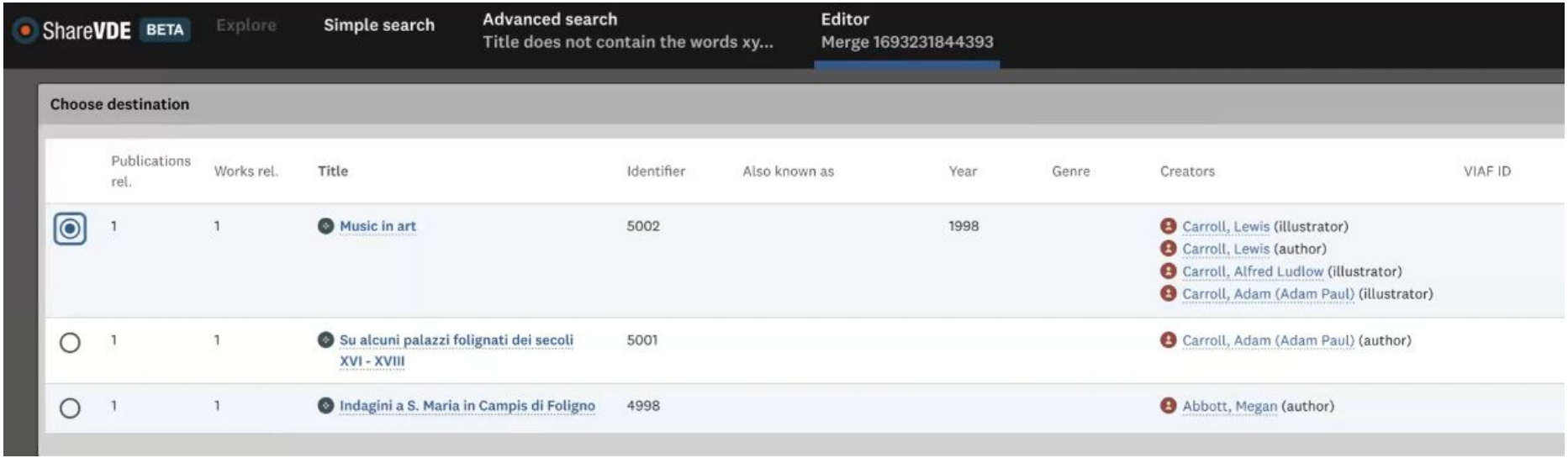


JCricket merge - select merged entities

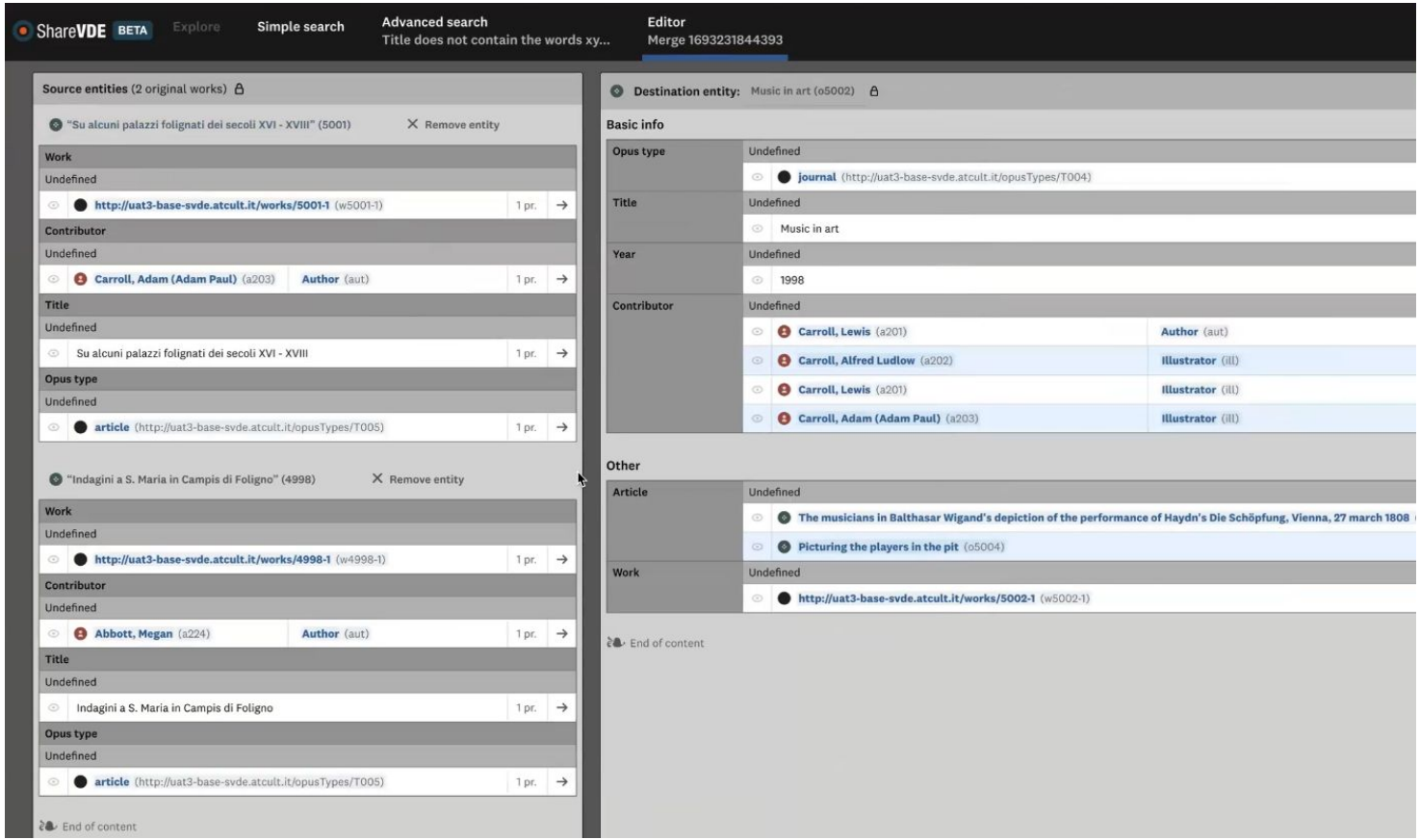




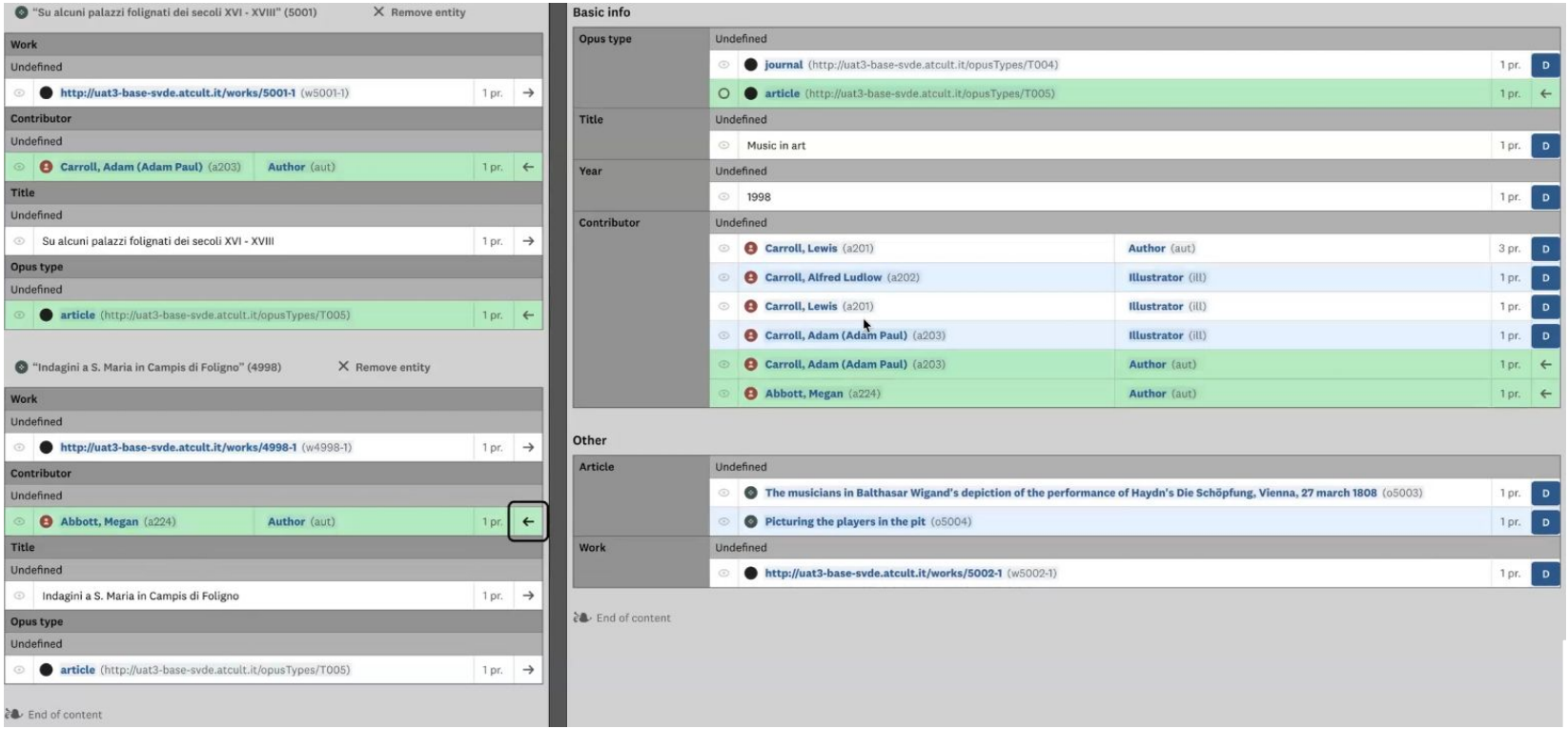
JCricket merge - select destination entity



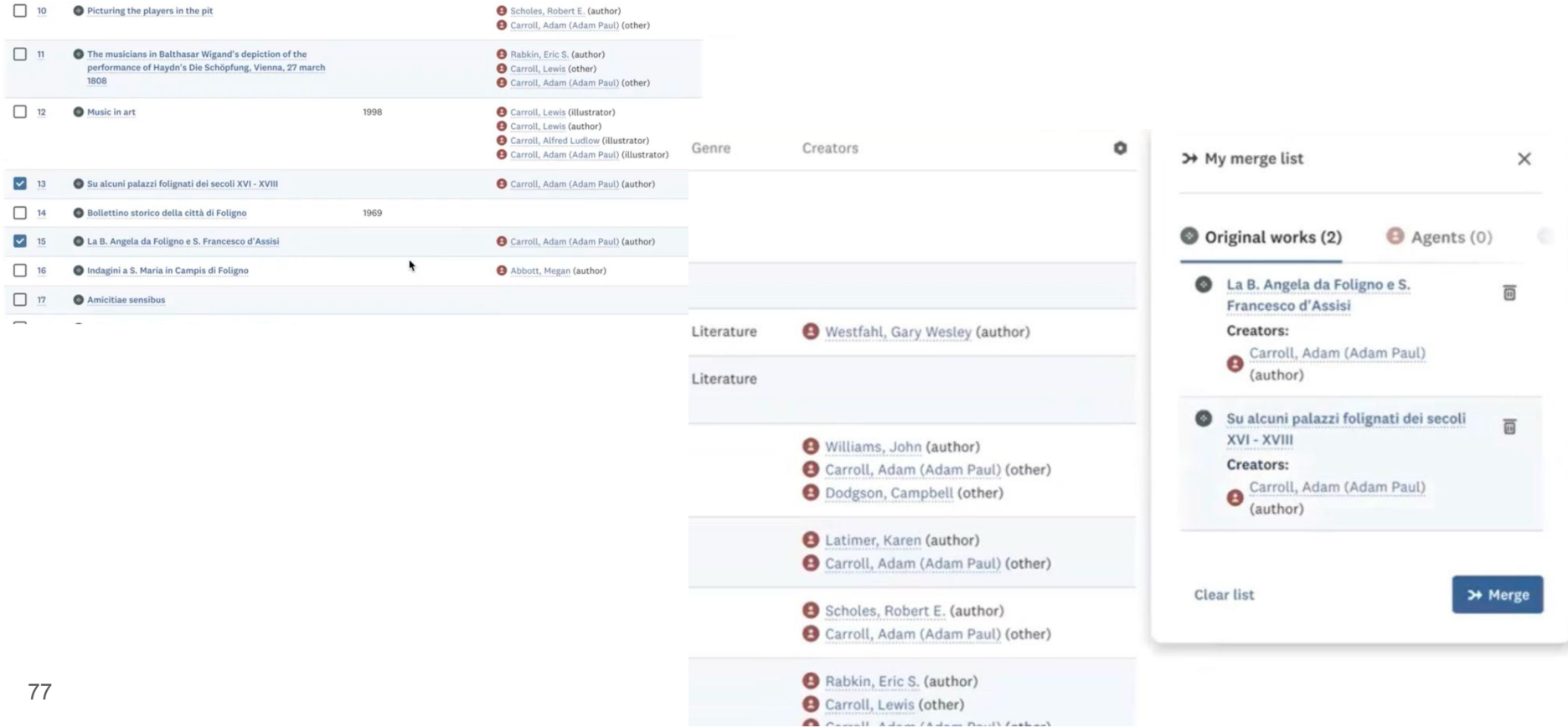
JCricket merge - select properties



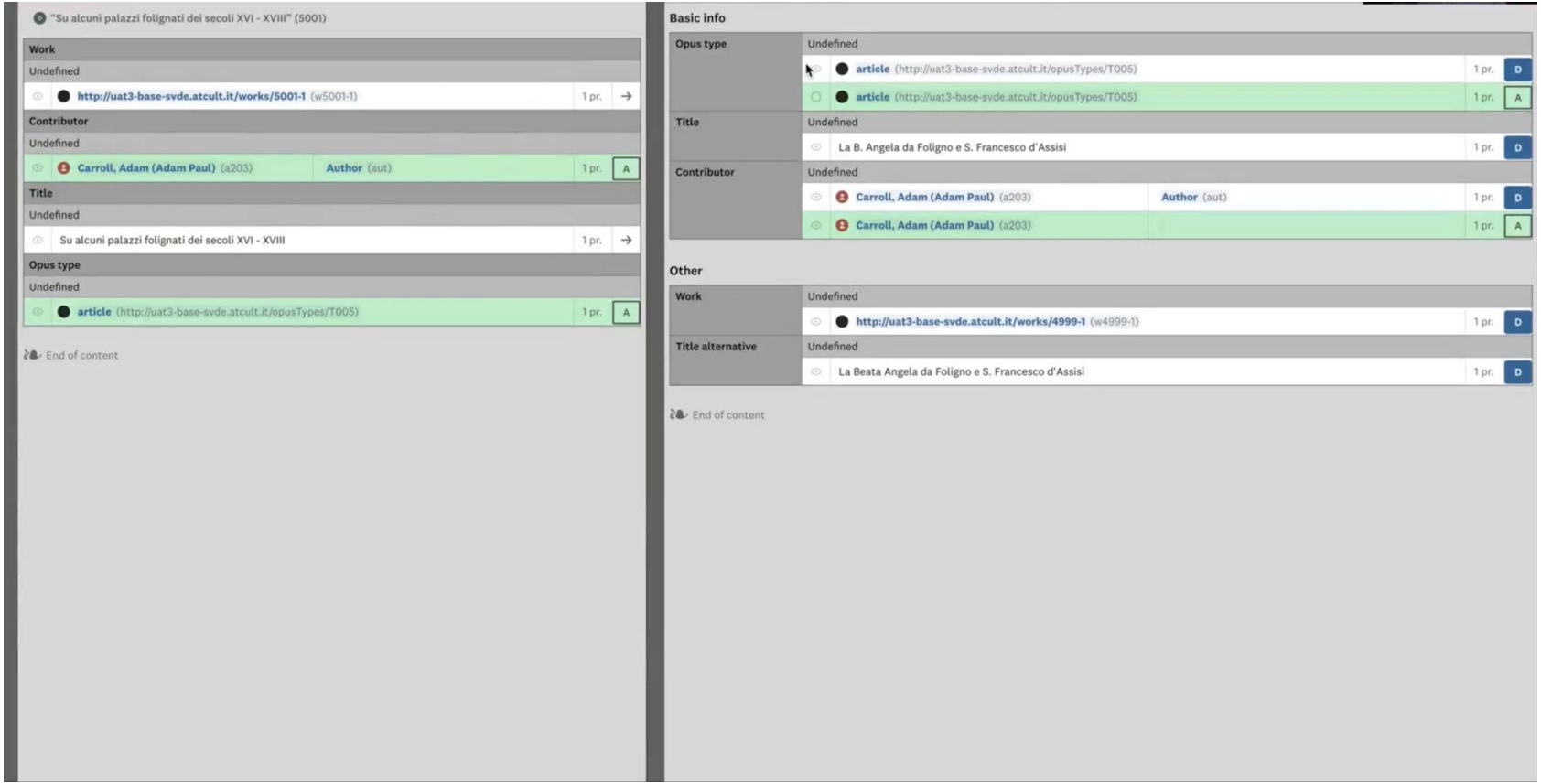
JCricket merge - select properties



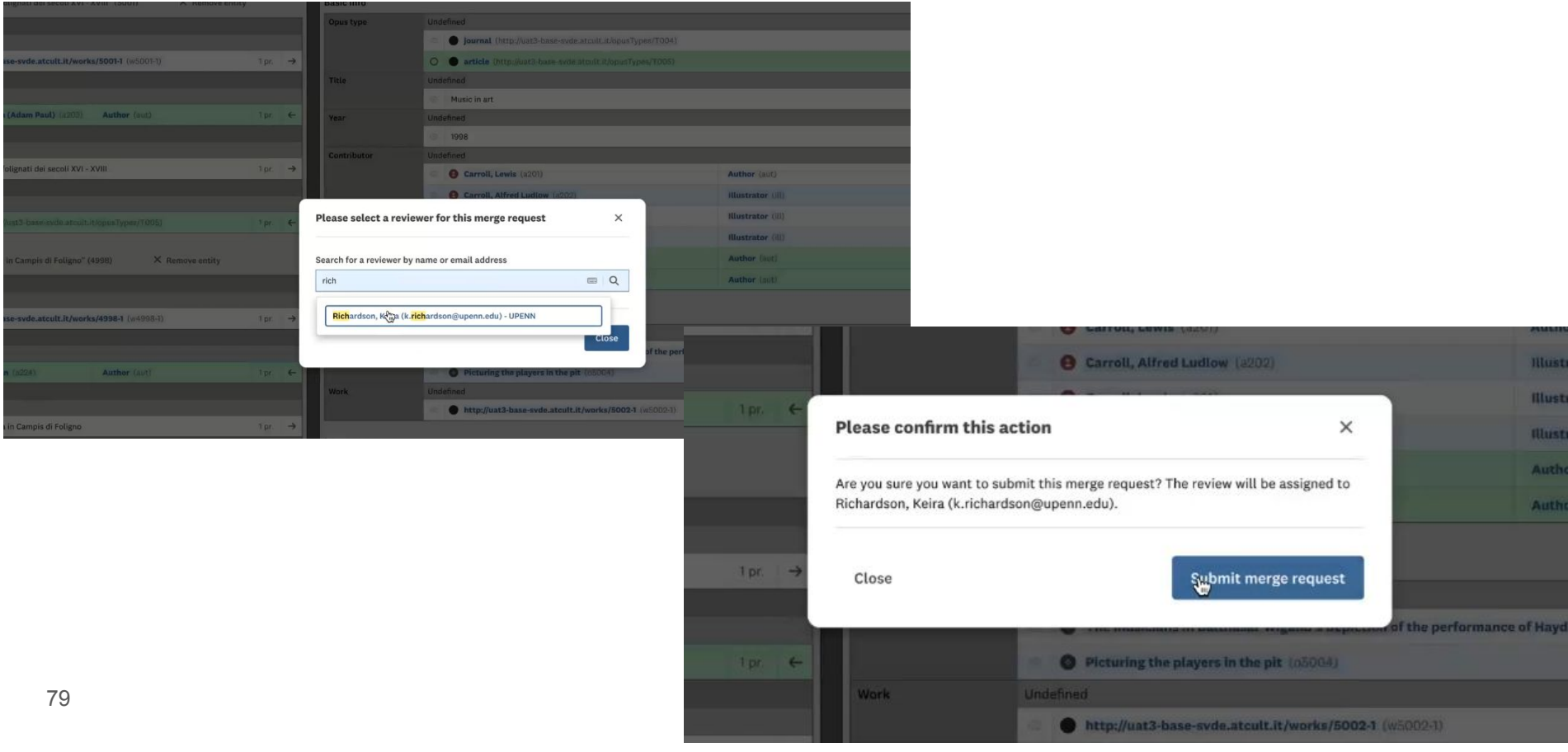
Merge entities where the role is the same



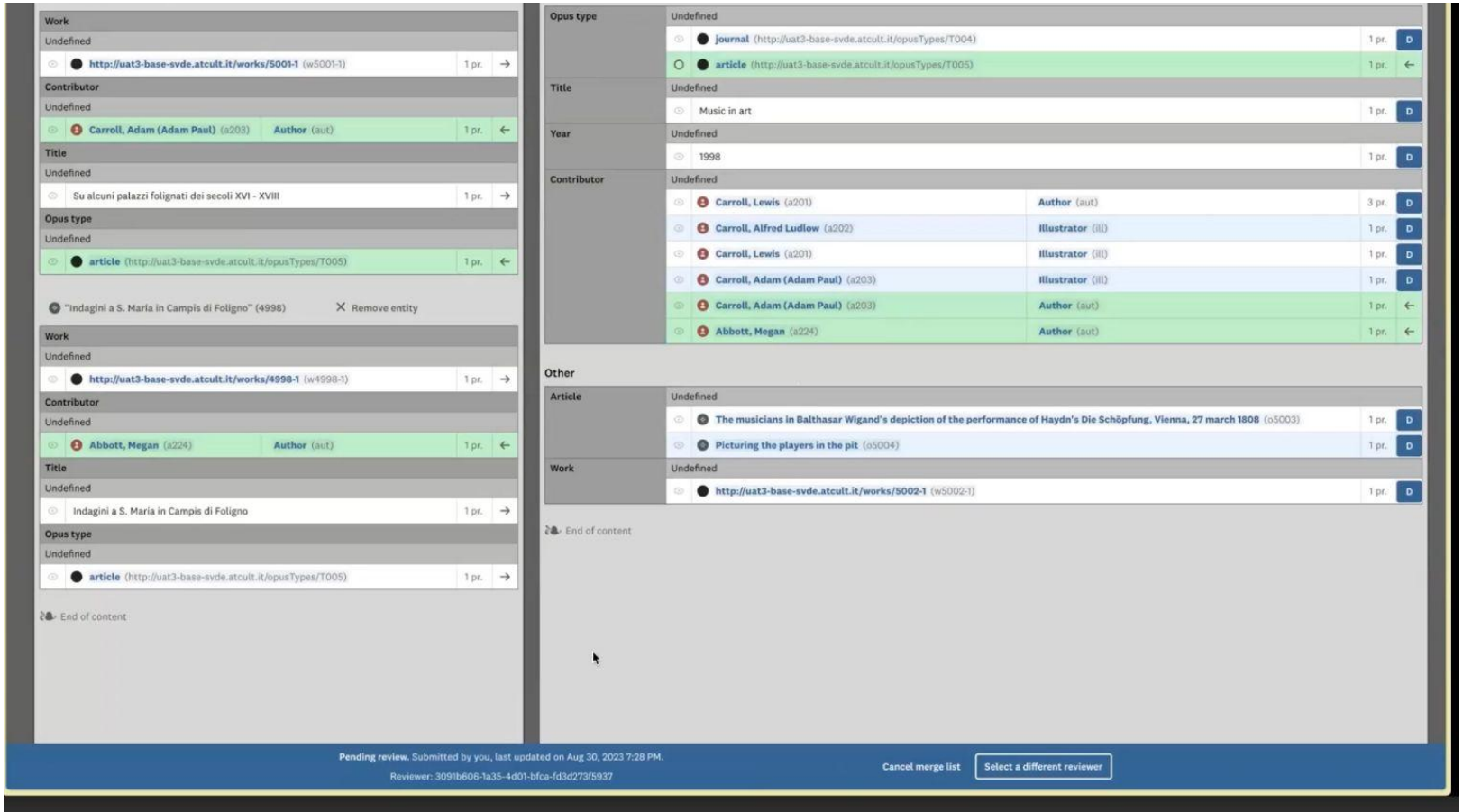
Properties **A**utomatically added (full matching)



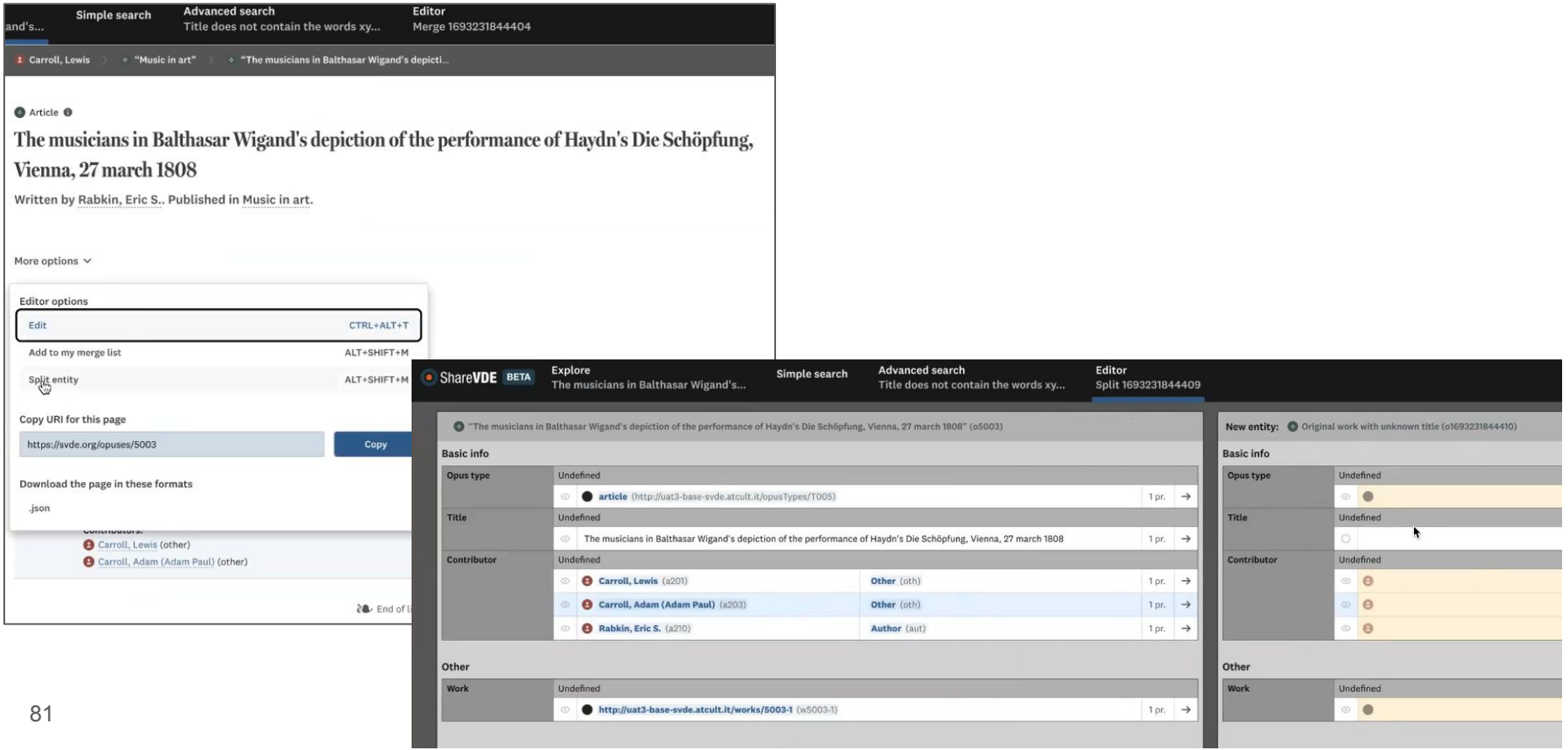
JCricket - review process



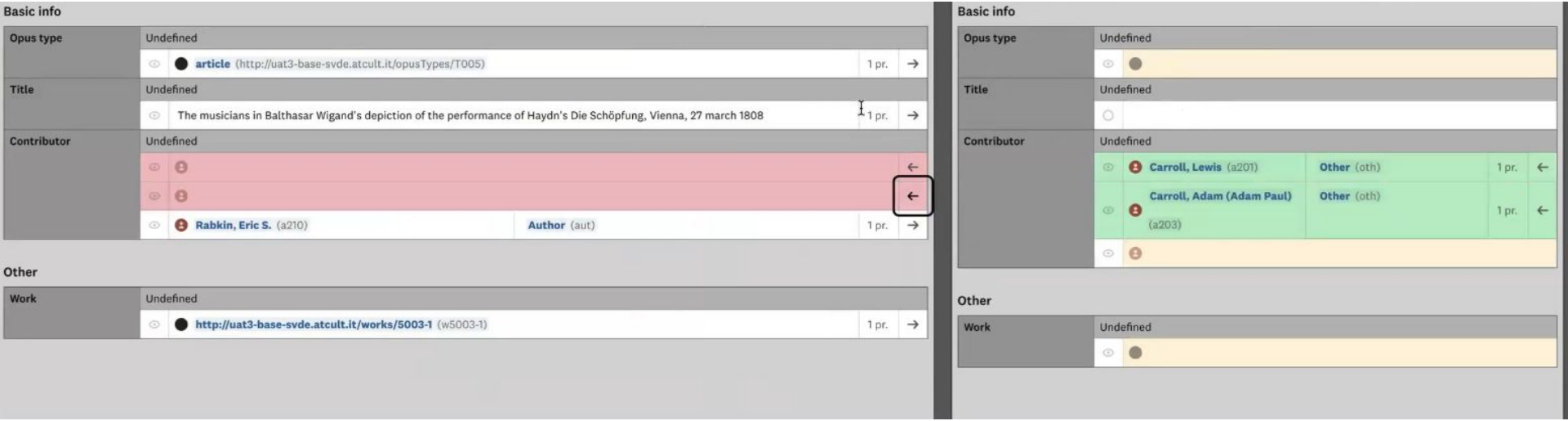
Merge - pending review



JCricket split



JCricket split - select properties



Thank you!

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