



# JCricket entity editor

Overview of the Share Family tool for a collaborative entity curation

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# What JCricket *is*

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- ☒ 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*

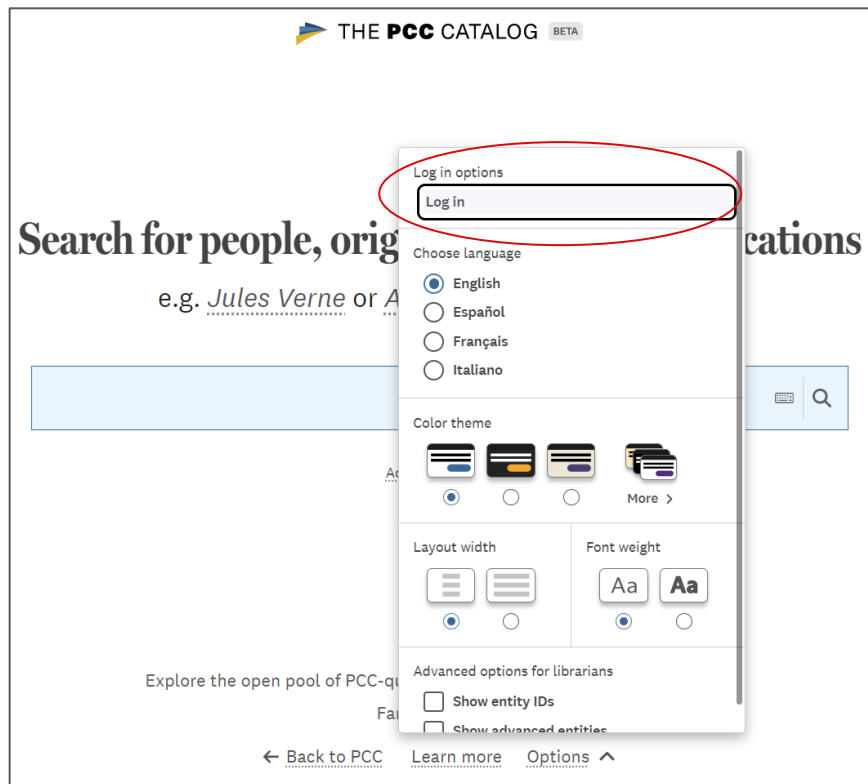
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- ✗ not a traditional bibliographic data editor
- ✗ not an original cataloguing tool
- ✗ not in contrast with Sinopia or Marva
- ✗ not impacting original data that reside in member libraries' systems (unless libraries want to use ad hoc APIs for entity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



# What it does



Integrated in the discovery portal web interface, **for authenticated users**

User types: **basic and advanced**

Entities aggregate data from different contributing libraries (aka Provenances):

★ **an entity is also called Prism**, where each face represents data coming from a given Provenance

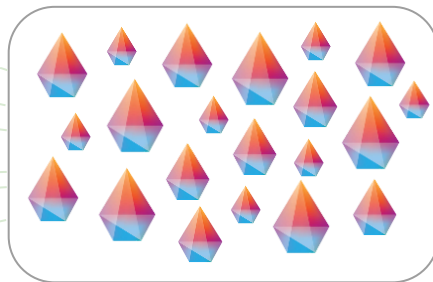


# The Big Picture: from Genesis to Edit

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.

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



Edit API

**JCRICKET**  
Entity Editor

Search API



Third-party Applications



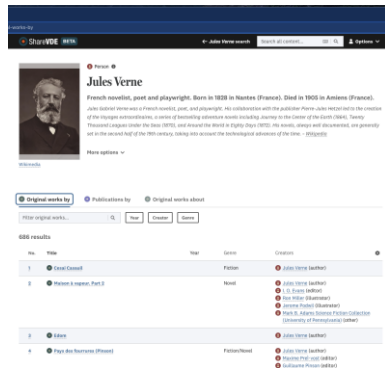
but...



Any third-party, authorized application can be a Share-VDE editor or reader

but...

Data is mainly searchable through the entity discovery portal.

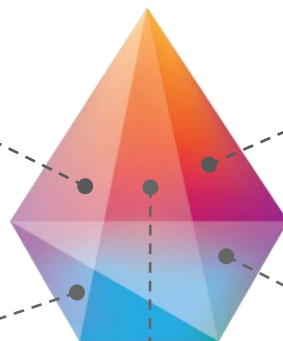




# Share-VDE Cluster: the Prism

 UNIVERSITY OF ALBERTA LIBRARY	
title	Alice in wonderland
titleAlternative	Alice's adventures under ground
author	<a href="https://svde.org/people/201">https://svde.org/people/201</a>

 Stanford	
title	Alice in wonderland
titleAlternative	Alice's adventures under ground
author	<a href="https://svde.org/people/201">https://svde.org/people/201</a>



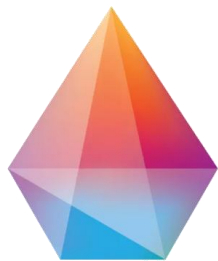
 LIBRARY OF CONGRESS	
title	Alice in wonderland





 National Library of Norway	
title	Alice's adventures under ground
titleAlternative	Journeys in Wonderland
author	<a href="https://svde.org/people/201">https://svde.org/people/201</a>

 (links)		
sameAs	<a href="http://dbpedia.org/resource/Alice&amp;#39;s_Adventures_in_Wonderland">http://dbpedia.org/resource/Alice&amp;#39;s_Adventures_in_Wonderland</a>	Dbpedia
sameAs	<a href="https://www.wikidata.org/wiki/Q189875">https://www.wikidata.org/wiki/Q189875</a>	Wikidata
sameAs	<a href="https://data.bnf.fr/ark:/12148/cb358500385#about">https://data.bnf.fr/ark:/12148/cb358500385#about</a>	bnf



# Properties: Attributes, Relationships, Links





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

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

		
sameAs	<a href="http://dbpedia.org/resource/Alice&amp;#39;s_Adventures_in_Wonderland">http://dbpedia.org/resource/Alice&amp;#39;s_Adventures_in_Wonderland</a>	Dbpedia
sameAs	<a href="https://www.wikidata.org/wiki/Q189875">https://www.wikidata.org/wiki/Q189875</a>	Wikidata
sameAs	<a href="https://data.bnf.fr/ark:/12148/cb358500385#about">https://data.bnf.fr/ark:/12148/cb358500385#about</a>	bnf

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

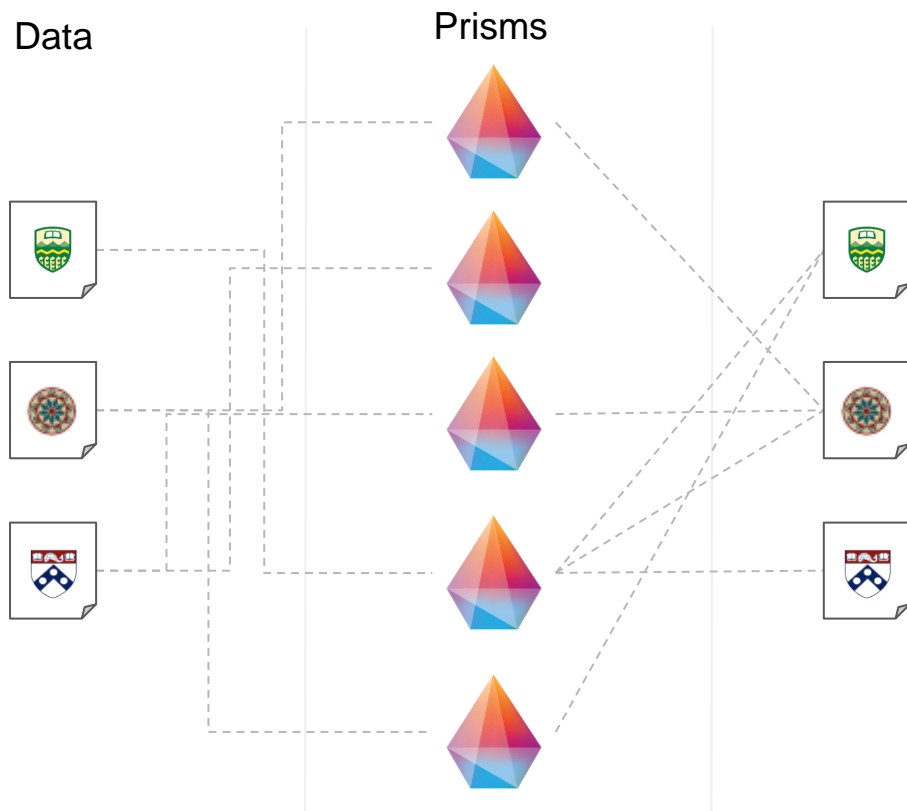
Name	Provenance
author	 LIBRARY OF CONGRESS  Stanford

A relationship is a connection between two Share-VDE Prisms

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



# Prism: Record-Level Provenance



Each record coming from a **provenance** **contributes** in **building/enriching** one or more **Share-VDE prisms**.

A Share-VDE entity can be seen as a **prism** where each **face** represents **data** coming from a given **provenance**

Each Share-VDE cluster maintains a **link** to the **records** it **originated from**



# JCricket: Edit Scenarios

**Edit:** a property\* of a prism is added/updated/deleted



~~Lewis Carroll~~ → Lewiss Carroll

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



properties can be

- attributes
- relationships
- links

**Merge:** multiple prisms are merged into one



For example, the editor detects multiple prisms that belong to the same entity.

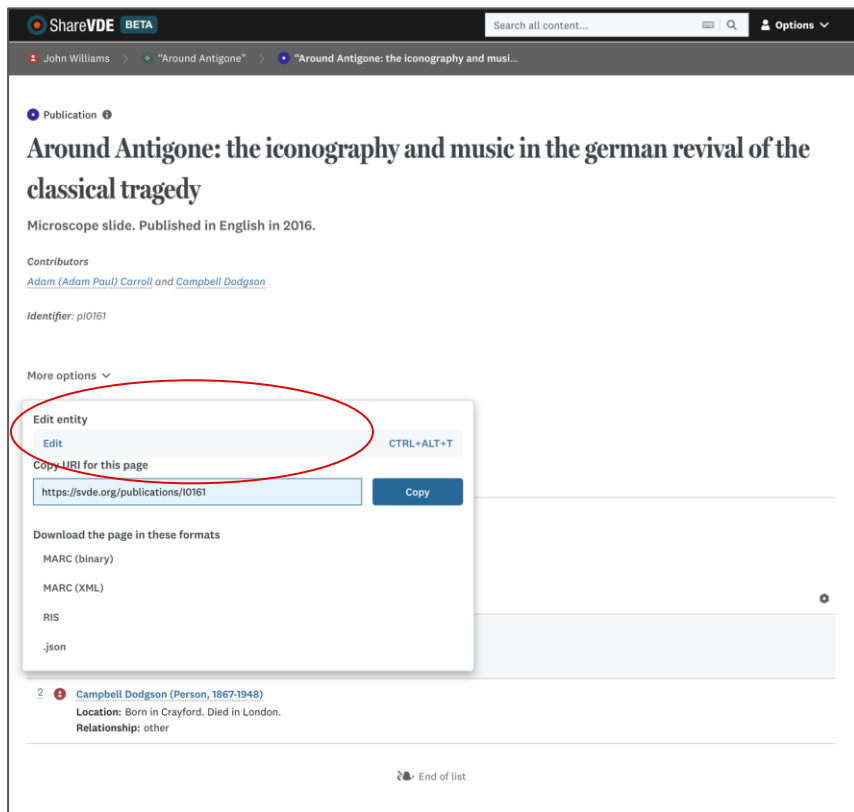
**Split:** a prism is split into multiple prisms



Several entities have been (wrongly) clustered into one.



# What it does



The screenshot shows the ShareVDE BETA web application. The top navigation bar includes a search bar and an 'Options' dropdown. The main content area displays a publication titled 'Around Antigone: the iconography and music in the german revival of the classical tragedy'. Below the title, it shows the publication date and contributors. A 'More options' dropdown menu is open, and the 'Edit entity' option is highlighted with a red circle. The 'Edit' button is also visible. Below the 'Edit entity' option, there is a 'Copy URL for this page' section with a text box containing the URL 'https://svde.org/publications/10161' and a 'Copy' button. At the bottom, there is a section for downloading the page in various formats (MARC, RIS, JSON) and a list of entities, including 'Campbell Dodgson (Person, 1867-1948)'.



**Edit function** to change entities' properties

- ★ add, remove and amend attributes, relationships and links belonging to a single entity
- ★ real time notifications about cluster property changes



**Merge function:** reconcile multiple entities into one (e.g. two authors who are in fact the same person)

- ★ choose the properties to copy to the merged entity
- ★ multiple phases: create the merge list, edit the merge list, edit clusters, request for review, approve (or deny) the merge





# What it does

The screenshot shows the ShareVDE BETA web interface. At the top, there's a search bar and a user menu. The main content area displays the title 'Around Antigone : the iconography and music in the german revival of the classical tragedy' and its publication year '2015'. Below this, there's a section for 'Edit metadata' with a 'Log' button. The 'Edit metadata' section contains a table with four rows, each representing a different type of entity: 'Title', 'Publication year', 'Print/online', and 'Auction/exhibition'. Each row has fields for 'Language' (set to 'Undefined'), 'Provenances' (a 'Select provenance' dropdown), and 'Leader' (a radio button). At the bottom of the table, there are buttons for 'Add attribute', 'Cancel', and 'Save and close'.

Entity Type	Title	Language	Provenances	Leader
Title	Around Antigone : the iconography and music in the german revival of the	Undefined	Select provenance	<input checked="" type="radio"/>
Publication year	2015		Select provenance	<input type="radio"/>
Print/online	7274	Undefined	Select provenance	<input checked="" type="radio"/>
Auction/exhibition	exhibition	Undefined	Select provenance	<input checked="" type="radio"/>



**Split and Create functions:** move one or more properties between two entities; optionally create a new one

- ★ choose the properties to move from entities

- ★ properties can be moved from an entity to create a brand new one

- ★ multiple phases: create the split-set, edit the split-set, edit clusters, request for review, approve (or deny) the split





# What it does

The screenshot shows the ShareVDE BETA web interface. At the top, there's a navigation bar with the ShareVDE BETA logo, a search bar, and an 'Options' dropdown. Below the navigation bar, there's a breadcrumb trail: 'John Williams' > 'Around Antigone' > 'Around Antigone : the iconography an...' > 'Edit'. The main content area displays the publication details for 'Around Antigone : the iconography and music in the german revival of the classical tragedy'. It includes the author 'John Williams', the title, a description 'Microscope slide. Published in English in 2015.', contributors 'Adam (Adam Paul) Carroll and Campbell Dodgson', ISBN '1234567891011', and identifier 'pi0161'. There are tabs for 'Edit metadata' and 'Log'. Below the tabs, there are buttons for 'Operation type', 'Provenance', and 'Event date'. The results section shows '38 results' and a sort option 'Sort by event date (9 - 0)'. The results list includes two entries: 'Property upsert end on 22/1/2023, 13:33:54' and 'Property upsert begin on 22/1/2023, 13:33:20'. Each entry shows provenance, user, and changes.

ShareVDE BETA

Search all content...

Options

John Williams > Around Antigone > Around Antigone : the iconography an... > Edit

Publication

**Around Antigone : the iconography and music in the german revival of the classical tragedy**

Microscope slide. Published in English in 2015.

Contributors

Adam (Adam Paul) Carroll and Campbell Dodgson

ISBN: 1234567891011

Identifier: pi0161

More options

Edit metadata Log

Operation type Provenance Event date

38 results

Sort by event date (9 - 0)

Property upsert end on 22/1/2023, 13:33:54

Provenance: Stanford Libraries

User: Loretta McCormick

Changes:

- Changed property: Title
- Value: एपिगोनस्य परितः : शास्त्रीयदुःखदृष्टनायाः जर्मनगुनरुपेने प्रतिमावैखनं सङ्गीतं च
- Language: SAN
- Leader: No

Property upsert begin on 22/1/2023, 13:33:20

Provenance: Stanford Libraries

User: Loretta McCormick

Changes:

Started editing priam i0161



**Review workflow:** edits are reviewed by advanced editors

★ notifications to manage the review workflow



**Dictionary API:** what are the available cluster types? Which attributes belong to a cluster type? What cardinality? Which relationships?



**Entity Event Log:** tracks the history of changes



**Data changes synchronization** across SVDE storages (e.g. RDF Store, Search Engine, RDBMS)





# JCricket live demo

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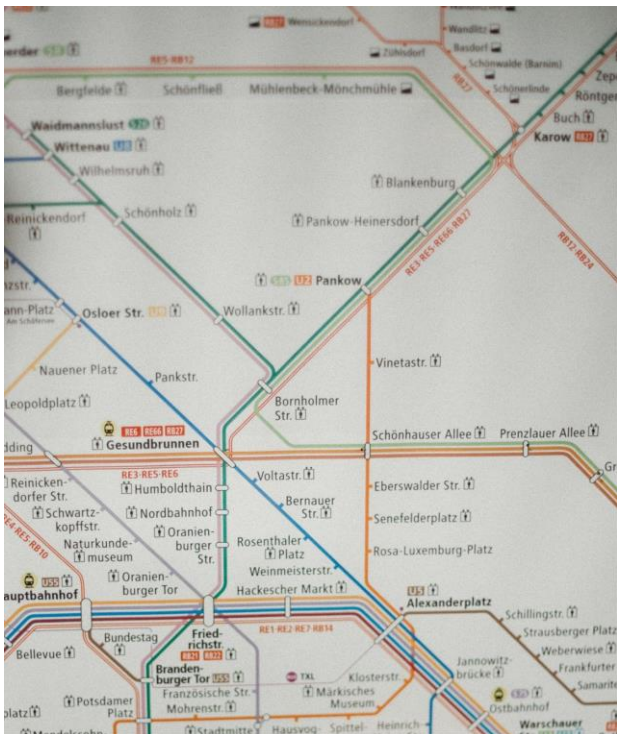
# Why JCricket is valuable



- ★ A **collaborative tool**, shared across the Share Family community and improving the data created within it
- ★ Linked data conversion in a shared discovery environment and **direct entity management** capabilities in one place
- ★ Increases **data quality** where massive automated processes are necessarily lacking
- ★ Collaboration ensures higher quality and **authoritativeness of data**
- ★ Conceived by **SVDE and Share Family community**, ie. **real users**
- ★ Potentially **complementary to other tools**, e.g. Sinopia - as they cover different aspects of the entity management flow
- ★ Could potentially **support other workflows** and connections with systems external to the Share Family
- ★ You can always **track back to your data** through the Provenance
- ★ JCricket will extend authority capabilities through the integration with external data sources such as **Wikidata**



# 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 🛠
  - progressive releases through 2023
  - the first live demo of *Edit* function was presented at ALA - Chicago 2023



# Next generation cataloguing

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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



# References

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Useful references:

- [https://wiki.share-vde.org/w/images/c/c7/Share\\_Family\\_data\\_flow.pdf](https://wiki.share-vde.org/w/images/c/c7/Share_Family_data_flow.pdf)
- for more technical details on JCricket [https://wiki.share-vde.org/w/images/e/e8/JCricket\\_entity\\_editor\\_presentation.pdf](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](https://wiki.share-vde.org/w/images/b/b3/Share-VDE_perspective_on_Cluster_Knowledge_Base_and_Provenance.pdf)





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