



JCricket: An Editor for Share-VDE and Beyond

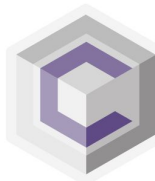
Entity management, connection with third parties and cross-domain extensions

ALA Core - Linked Data Interest Group, March 7th 2023, Andrea Gazzarini

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Andrea Gazzarini: Who I am

- Software Engineer (1999-)
- “Hermit” Software Engineer (2010-)
- Programming Passionate
- Information Retrieval Passionate
- Author of “Apache Solr Essentials”
- Apache Qpid (past) Committer
- Founder of [SpazioCodice](#) </>
- [Share-VDE](#) Lead Architect
- Husband & Father
- Bass Player
- Chapman Stick (aspiring) Player



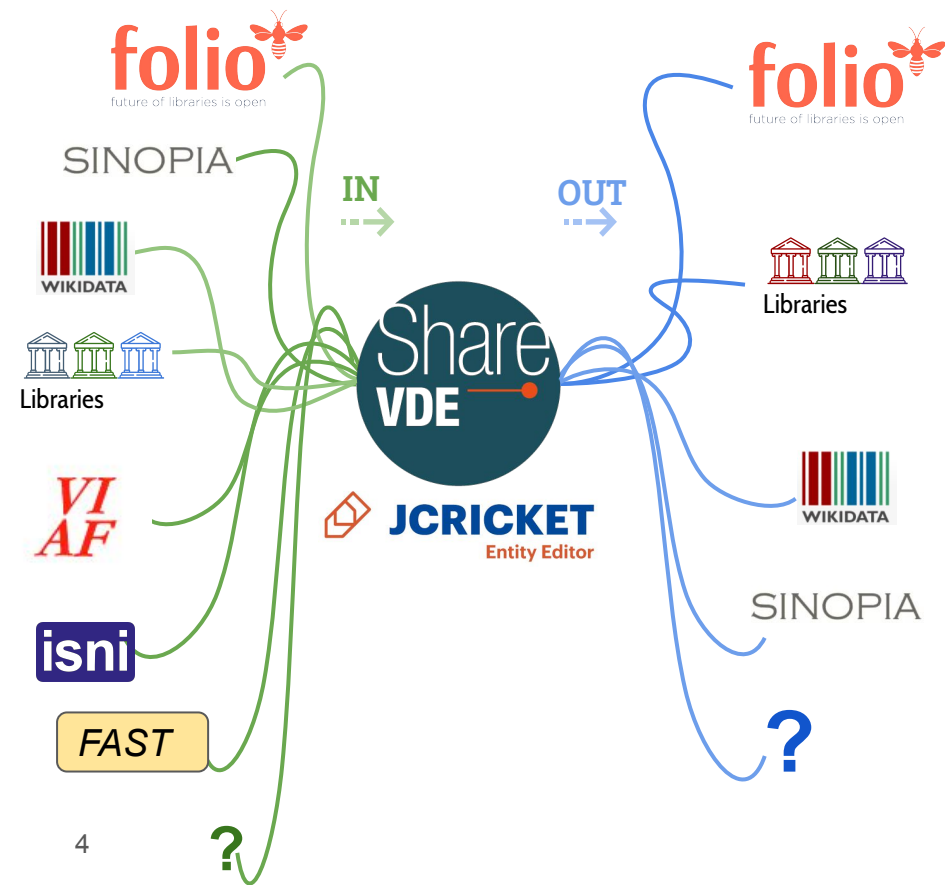
CUMULUSRDF



The Share-VDE Initiative



Share-VDE: Share Virtual Discovery Environment



In a Nutshell

Share-Virtual Discovery Environment is a **library-driven** initiative which brings together, in a shared discovery environment, the **bibliographic catalogues** and **authority files** of a growing number of leading **academic** and **national libraries** from across **North America** and **Europe**.



Share-VDE Knowledge Base



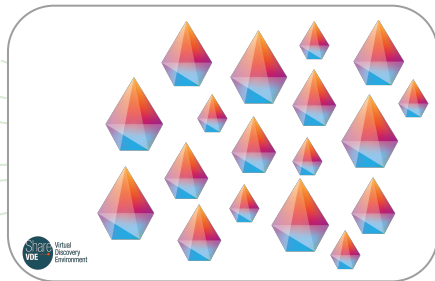
Core Concepts: Tenant and Provenance

Share-VDE manages a **Knowledge Base** which consists of **clustered, integrated and enriched** entities

In Share-VDE, a **tenant** is represented by a **set of institutions** contributing to the **same Knowledge base**



Share-VDE Knowledge Base (Sapientia)



An **institution** within a tenant is called **provenance**.

We use that term because we want to **retain** the relationship between **Share-VDE entities** and data that originally **contributed** to them.

Share Family and Share-VDE liaisons

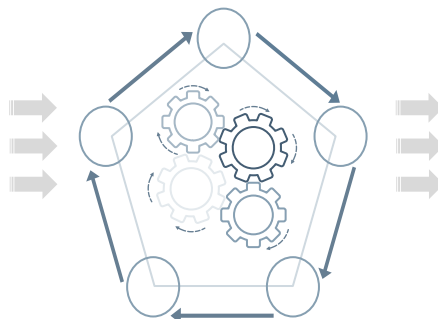
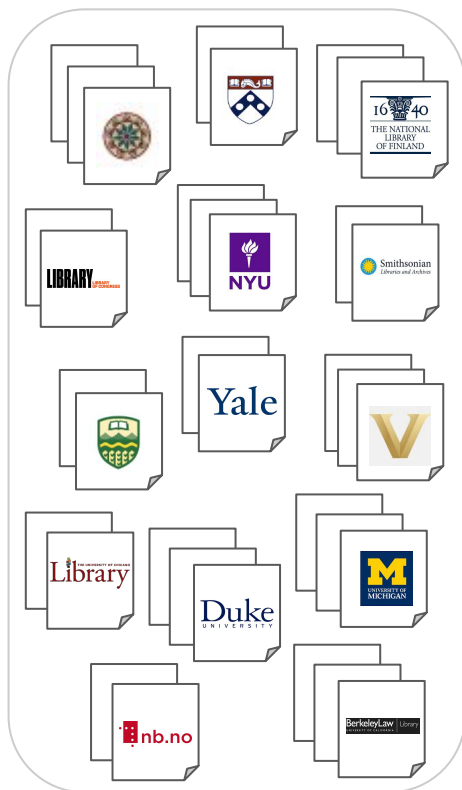
Multiple tenants form the **Share Family**. Family members interoperate through a centralized registry.



Ingestion Pipeline: How does it work?



Data



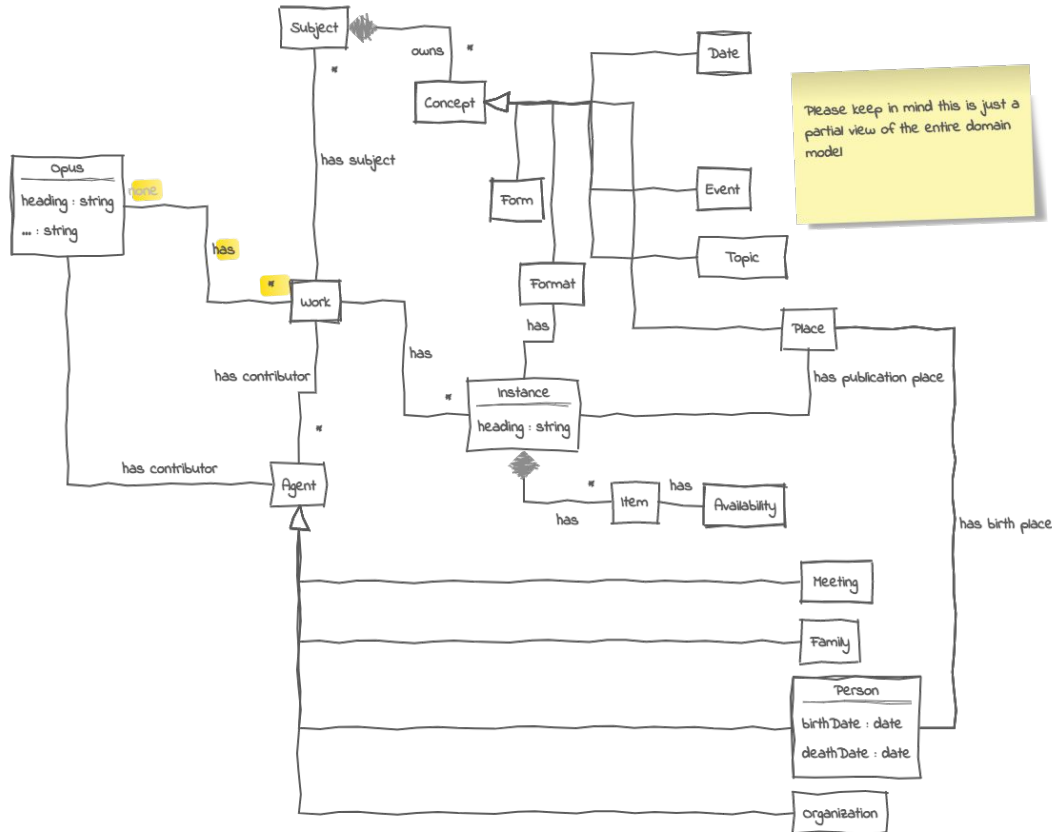
Knowledge Base (Sapientia)



The Entity as a “Prism”



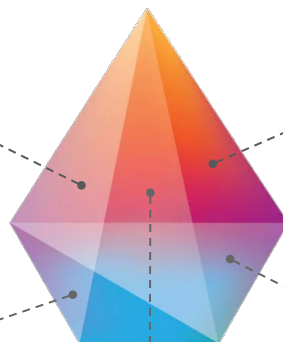
Share-VDE: the Domain Model




Share-VDE Cluster: the Prism

 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

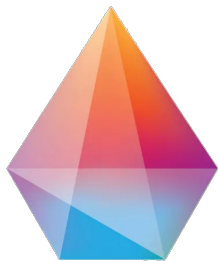






 LIBRARY OF CONGRESS	
title	Alice in wonderland

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

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

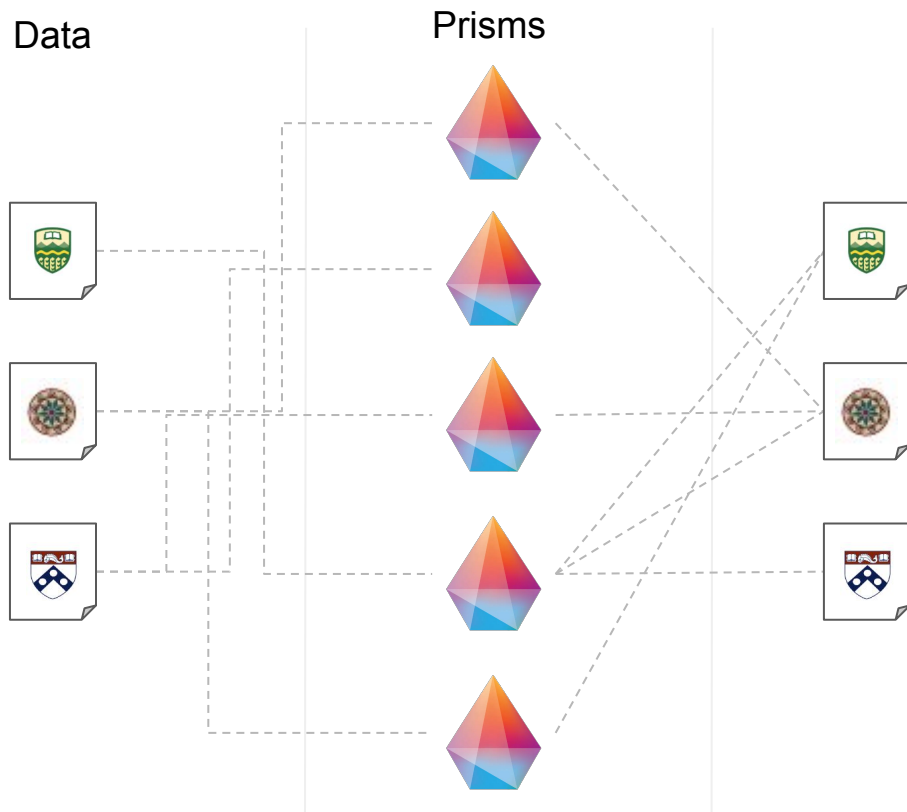
A link is a connection between a Share-VDE Prism and an external reference

Name	Provenance
author	 LIBRARY OF CONGRESS  Stanford

A relationship is a connection between two Share-VDE Prisms

Name	Value	Provenance
name	Carroll, 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**

Sapientia Edit API: JCricket



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

Search|API

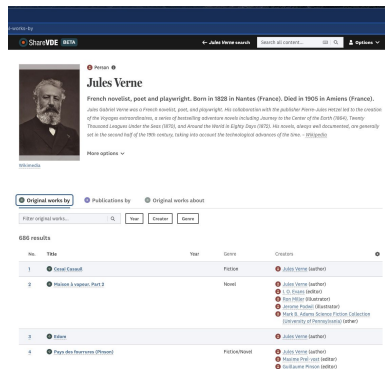
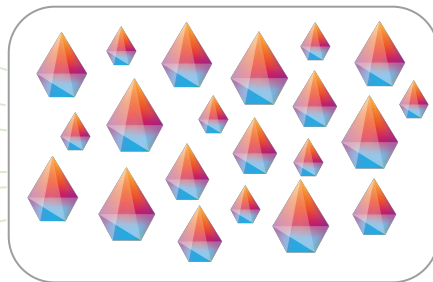
but...

Third-party Applications

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

but...

Data is mainly searchable through the entity discovery portal.



JCRICKET
Entity Editor



JCricket: Edit Scenarios

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



~~Lewis Carroll~~



Lewis 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.

Outbound Connectors Framework

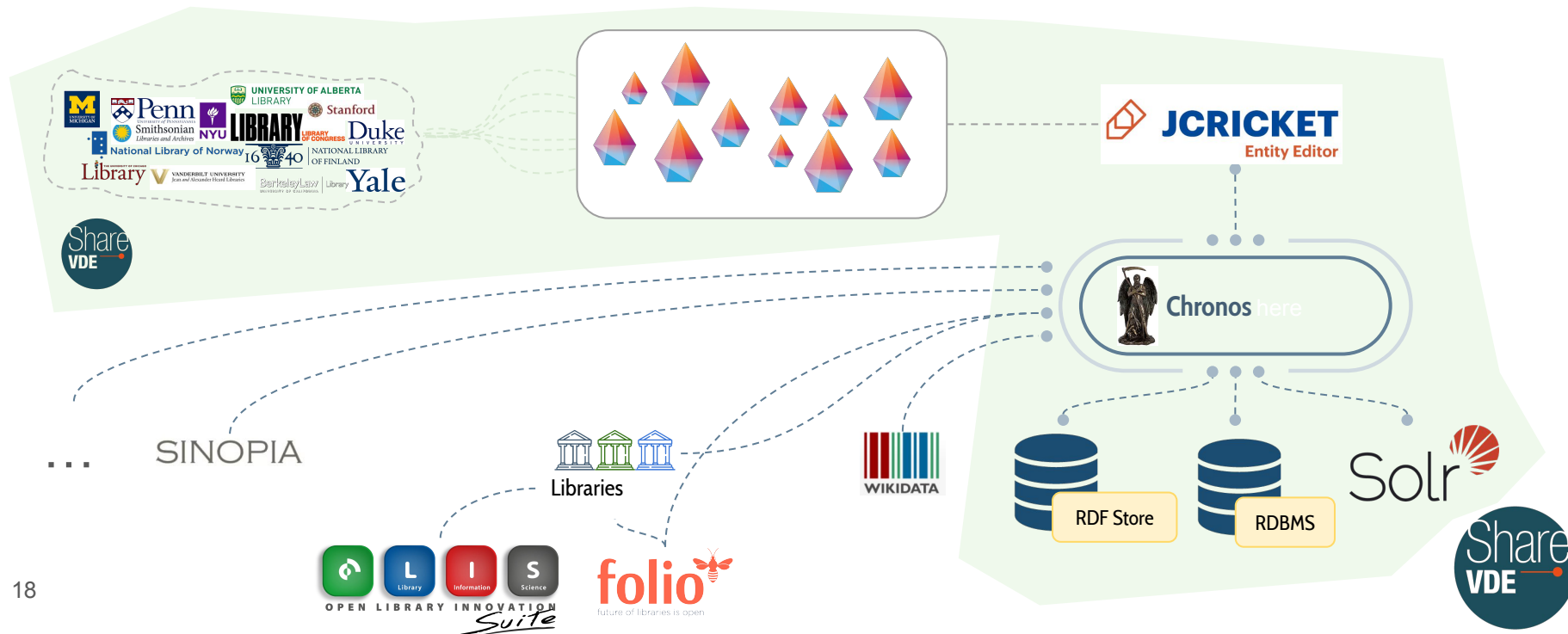


Outbound Connectors Architecture

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.

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Get involved!

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



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

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

info@svde.org

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

<https://www.svde.org/about/about-share-vde>

Thank you!



Virtual
Discovery
Environment

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