Share Family
Advancements in linked data collaboration

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BIBFRAME interoperability

CKB granularity
- controlled vocabularities
- provision activity

Conversion tool

Third party integration
- Alma
- FOLIO
- Sinopia

CKB Granularity

Objective

CKB as a **single source of truth** for the LOD Platform and Share Family installations

How?

- a **finer granularity** level of the CKB in compliance with BIBFRAME granularity

What will this improve?

- a "**format-agnostic**" CKB where all input formats converge into one conversion source (eg. MARC21, UNIMARC, native BIBFRAME/RDF eg. from LD4P Sinopia application profiles...)
- **improved conversion** from MARC to BIBFRAME and vice versa
- **single conversion pipeline** from the CKB – removing the conversion pipeline based on MARC

CKB granularity - controlled vocabularies

One of the main pipelines we're following in this context is the management of attributes through controlled vocabularies instead of literals.

How we did it:
- definition of each controlled vocabulary in collaboration with the Sapientia Entity Identification working group

Projects / Share-VDE / SVDE-8492 / ✅ SVDE-9841

Polarity vocabulary definition

- each vocabulary is enriched with external authoritative sources (RDA, LOC, FINTO...)
- clusterization of controlled vocabulary, each value is then assigned an SVDE URI

Projects / Share-VDE / SVDE-8492 / ✅ SVDE-9638

Polarity vocabulary clusterization

➡ **values: from literals to URIs**

CKB granularity - controlled vocabularies

For some attributes → two combined solutions:

1. values coming from positional tags are reconciled with values from controlled vocabulary
2. where this is not possible, management of literal attribute

☑ SVDE-9622 SoundContent vocabulary clusterization

☑ SVDE-9621 ColorContent vocabulary clusterization

What we've done (1)...

Projects / Share-VDE / SVDE-8492

- ✓ SVDE-9843 — Mount, Emulsion, PresentationFormat, PlaybackChannels vocabulary definition — DONE
- ✓ SVDE-9844 — PlayingSpeed, GrooveCharacteristic, TapeConfig, SpecialPlaybackCharacteristic vocabulary definition — DONE
- ✓ SVDE-9846 — SoundCapture, VideoFormat, EncodingFormat, Frequency vocabulary definition — DONE
- ✓ SVDE-9899 — ReductionRatio and Record status vocabularies definition — DONE
- ✓ SVDE-9900 — NoteType vocabulary definition — DONE
- ✓ SVDE-9628 — Projection vocabulary clusterization — DONE
- ✓ SVDE-8194 — Media type as controlled vocabulary — DONE
- ✓ SVDE-8663 — TargetAudience vocabulary — DONE
- ✓ SVDE-9622 — SoundContent vocabulary clusterization — DONE
- ✓ SVDE-9621 — ColorContent vocabulary clusterization — DONE
- ✓ SVDE-9625 — SupplementaryContent vocabulary clusterization — DONE
- ✓ SVDE-9626 — GovernmentPubType vocabulary clusterization — DONE
- ✓ SVDE-9629 — MusicFormat vocabulary clusterization — DONE
- ✓ SVDE-9631 — Script vocabulary clusterization — DONE
- ✓ SVDE-9630 — SerialPubType vocabulary clusterization — DONE

Share FAMILY

What we've done (2)...

Projects / Share-VDE / SVDE-8492

- [x] SVDE-9830 Relief vocabulary definition
- [x] SVDE-9831 Projection vocabulary definition
- [x] SVDE-9832 MusicFormat vocabulary definition
- [x] SVDE-9833 SerialPubType vocabulary definition
- [x] SVDE-9834 Script vocabulary definition
- [x] SVDE-9835 MovingImageTechnique vocabulary definition
- [x] SVDE-9836 Issuance vocabulary definition
- [x] SVDE-9837 DescriptionConventions vocabulary definition
- [x] SVDE-9838 SupportMaterial vocabulary definition   = DONE ⌄
- [x] SVDE-9839 Generation vocabulary definition   = DONE ⌄
- [x] SVDE-9840 ProductionMethod vocabulary definition   = DONE ⌄
- [x] SVDE-9841 Polarity vocabulary definition   = DONE ⌄
- [x] SVDE-9842 RecordingMedium vocabulary definition   = DONE ⌄

- [x] SVDE-9777 ColorContent vocabulary definition   = DONE ⌄
- [x] SVDE-9778 SoundContent vocabulary definition   = DONE ⌄
- [x] SVDE-9779 AspectRatio vocabulary definition   = DONE ⌄
- [x] SVDE-9780 Illustration vocabulary definition   = DONE ⌄
- [x] SVDE-9781 SupplementaryContent vocabulary definition   = DONE ⌄
- [x] SVDE-9782 GovernmentPubType vocabulary definition   = DONE ⌄
- [x] SVDE-9783 EncodingLevel vocabulary definition   = DONE ⌄

...What's left to do

After completing the work on these vocabularies, they will be made available on JCricket!

☑ SVDE-9632	MovingImageTechnique vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9633	Issuance vocabulary clusterization	
☑ SVDE-9634	DescriptionConventions vocabulary clusterization	
☑ SVDE-9635	BaseMaterial and SupportMaterial vocabulary clus	
☑ SVDE-9636	Generation vocabulary clusterization	
☑ SVDE-9637	ProductionMethod vocabulary clusterization	
☑ SVDE-9638	Polarity vocabulary clusterization	
☑ SVDE-9639	RecordingMedium vocabulary clusterization	
☑ SVDE-9640	Mount vocabulary clusterization	
☑ SVDE-9641	Emulsion vocabulary clusterization	
☑ SVDE-9642	PresentationFormat vocabulary clusterization	
☑ SVDE-9643	PlaybackChannels vocabulary clusterization	
☑ SVDE-9644	PlayingSpeed vocabulary clusterization	

☑ SVDE-9645	GrooveCharacteristic vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9646	TapeConfig vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9647	SpecialPlaybackCharacteristic vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9648	SoundCapture vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9649	VideoFormat vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9650	EncodingFormat vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9651	Frequency vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9678	ReductionRatio vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9681	ColorContent NO controlled vocabulary	= 👤 TO DO ⌄
☑ SVDE-9679	Encoding level vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9680	Record status vocabulary clusterization	= 👤 TO DO ⌄
☑ SVDE-9685	SoundContent NO controlled vocabulary	= 👤 TO DO ⌄

CKB Granularity - provisional activity

Information relative to **Publishers** has been structured in a singular RDF section

What for? → better identification and reconciliation of Publishers

SVDE-10039	Publisher management update in Folio CKB integration
SVDE-9502	API management for new entity Provision Activity
SVDE-10005	Provision Activity not generate for Unimarc
SVDE-9901	Wrong ProvisionActivity clusterization
SVDE-9501	Enrichment Provision Activities from tag 260/264
SVDE-9275	Grouping publication attributes
SVDE-8296	26x conversion for 008 [06] = p

The SVDE ontology - a BIBFRAME extension

The Share-VDE Ontology supports the Share Family of initiatives (based in federated linked data discovery environments) and is developed as an **extension to BIBFRAME**.
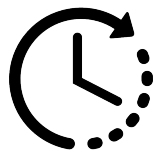
Almost completed!

Preliminary version:

https://doi.org/10.5281/zenodo.8332351

latest update by Nancy Lorimer at the Share Family Workshop 2024

The SVDE ontology - a BIBFRAME extension

has type

has opus type

Opus

Opus
Type

has expression

Annotations
svde:closeMatch

dcterms:relation

bf:
Work

svde:
Work

subclass of

in Hub

bf:Hub

→ Cartography
→ Choreography
→ Collection
→ Computer Program
→ Dataset
→ Event
→ Game or Interactive Media
→ Image
→ Language
→ Music
→ Physical Object
→ Other
→ Sounds
→ Unspecified
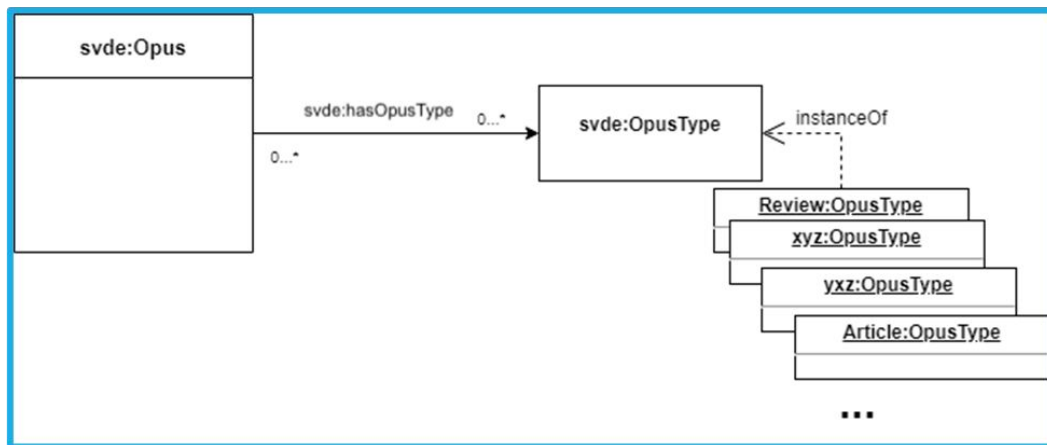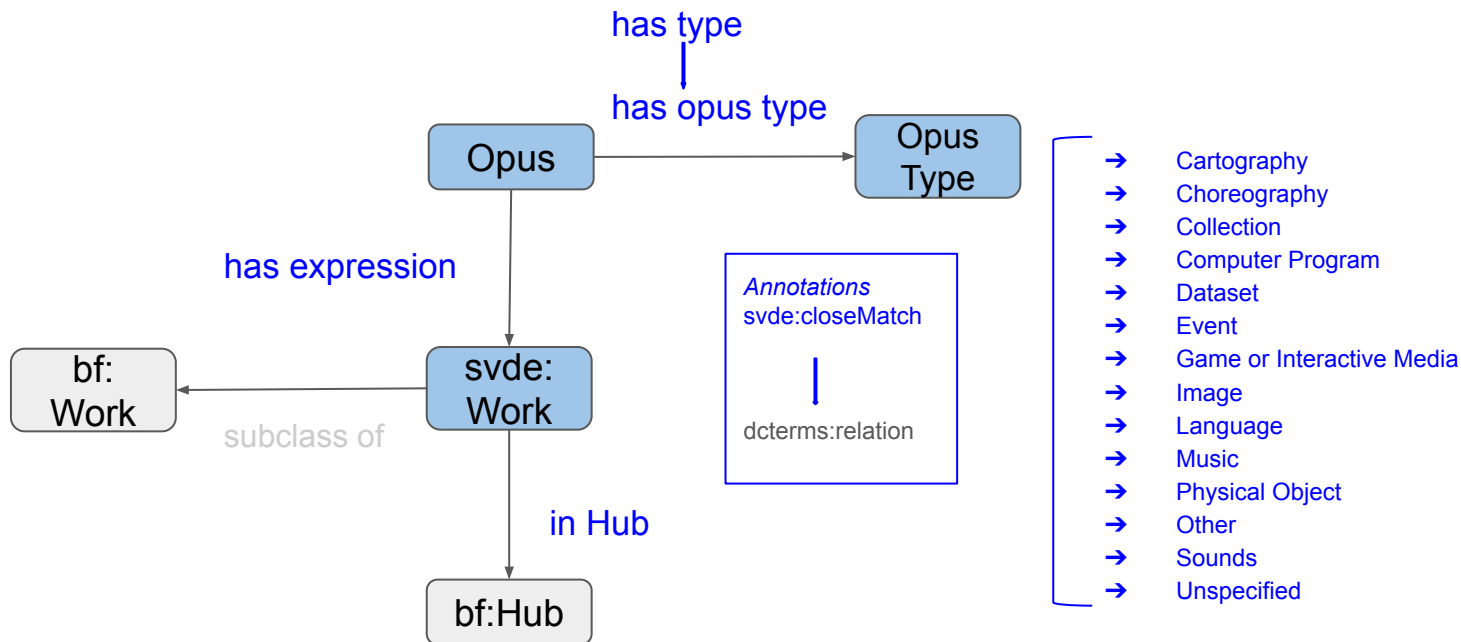
Converter tool

Designed to be flexible to:

1. Manage BIBFRAME updates
2. Ensure compatibility with different BIBFRAME variations

Current outputs:

- SVDE ontology-based output
- LOC collaboration: testing pure BIBFRAME ontology with bflc extension

Additional path:

- Exploration of IFLA-LRM/RDA model

Third party integration

ALMA

✅ circulation processes

🚧 together with Alma libraries, exploration of CRUD APIs

FOLIO

- **pilot integration** in progress with Lehigh University (Share-VDE member and FOLIO adopter)
- initial tests completed: automated data flow from JCricket into FOLIO's Inventory module (reverse flow to be implemented)
- JCricket: enables this integration and can also be used for original cataloging.

SINOPIA integration: high-level milestones

✅ set-up the connector to fetch data from Sinopia

✅ ingested subset of Sinopia data from Stanford

✅ created the parser so that RDF data coming from Sinopia can be clustered by Share-VDE processes

🚧 begin testing phase

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

SINOPIA integration: high-level milestones

Projects / Share-VDE / SVDE-7910

✓	SVDE-4571	Create SINOPIA Connector Configuration Tables	= 2	DONE ✓
✓	SVDE-3453	Sinopia Periodic / OnDemand Inbound Pull Connector	= 10	DONE ✓
	SVDE-4518	[Spike] Sinopia Integration	= 0	DONE ✓
✓	SVDE-4568	Map SINOPIA groups to SHAREVDE members	= 1	DONE ✓
✓	SVDE-4570	Create ShareVDE Scheduled Tasks Module	= 2	DONE ✓
✓	SVDE-4839	ScheduledTasks Retrieval API Improvements	= 2	DONE ✓
	SVDE-8524	[Spike] Sinopia to SVDE: ingestion test file from Sinopia	= 4	DONE ✓
	SVDE-8709	[Spike] Mapping RDF Sinopia data to CKB	= AM	DONE ✓
✓	SVDE-8840	SinopiaParser creation	=	DONE ✓

✓	SVDE-8840	SinopiaParser creation	=	DONE ✓
✓	SVDE-8842	Sinopia - Attributes and clusterization for OPUS entity	=	DONE ✓
✓	SVDE-8843	Sinopia - Attributes and clusterization for AGENT entity	=	DONE ✓
✓	SVDE-8844	Sinopia-Parse for Work records of Sinopia	=	DONE ✓
✓	SVDE-8846	Sinopia - Parse for Instance records of Sinopia	=	DONE ✓
✓	SVDE-8848	Sinopia - Attributes and clusterization for SUBJECT entity	=	DONE ✓
✓	SVDE-9204	Pairing code for Sinopia integration	=	DONE ✓
✓	SVDE-9179	Implement the parse function for Sinopia record	=	DONE ✓
✓	SVDE-9180	Parsing Record type	=	DONE ✓
✓	SVDE-9181	Parsing Language and CatalogLanguage of Sinopia Work	=	DONE ✓
✓	SVDE-9182	Implement a function for retriving Sinopia resource by the URI	=	DONE ✓
✓	SVDE-9183	Parsing title of Sinopia Instance	=	DONE ✓
✓	SVDE-9184	Parsing Work Attributes	=	DONE ✓

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SINOPIA integration: high-level milestones

Projects / Share-VDE / SVDE-7910

☑	SVDE-9256	Sinopia - Attributes and clusterization for INSTANCE entity	=	DONE ⌄
☑	SVDE-9328	Sinopia - relationship for OPUS ENTITY	=	DONE ⌄
☑	SVDE-9329	Sinopia - relationship for WORK ENTITY	=	DONE ⌄
☑	SVDE-9330	Sinopia - relationship for INSTANCE ENTITY	=	DONE ⌄
☑	SVDE-9331	Sinopia - relationship for AGENT ENTITY	=	DONE ⌄
☑	SVDE-9333	Sinopia- fix error with cluster Agent creation	=	DONE ⌄
☑	SVDE-9352	Sinopia-Cluster agent reconciliation	=	DONE ⌄
☑	SVDE-9353	Sinopia-cluster opus reconciliation	=	DONE ⌄
☑	SVDE-9354	Sinopia-cluster work reconciliation	=	DONE ⌄
☑	SVDE-9355	Sinopia-cluster instance reconciliation	=	DONE ⌄
☑	SVDE-9356	Sinopia-cluster subject reconciliation	=	DONE ⌄
☑	SVDE-9390	Fix searchByHeading function	=	DONE ⌄
☑	SVDE-9503	Sinopia management of new entity Provision Activity	=	DONE ⌄

Projects / Share-VDE / SVDE-7910

☑	SVDE-9186	Parsing oring place of Sinoipia Work	=	DONE ⌄
☑	SVDE-9187	Parsing GenreForm of Sinopia Work	=	DONE ⌄
☑	SVDE-9189	Parsing Contribution of Sinopia work	=	DONE ⌄
☑	SVDE-9192	Parsing subjects of Sinopia Work	=	DONE ⌄
☑	SVDE-9194	Parsing Identifier of Sinopia Instance	=	DONE ⌄
☑	SVDE-9242	Parsing Title of Sinopia Work	=	DONE ⌄
☑	SVDE-9243	Parsing Linking entry of Sinopia Work	=	DONE ⌄
☑	SVDE-9244	Parsing publisher of Sinopia Instance	=	DONE ⌄
☑	SVDE-9245	parsing Instance Attributes of the Sinopia Instance	=	DONE ⌄
☑	SVDE-9246	Parsing Edition Statement of Sinopia Instance	=	DONE ⌄
☑	SVDE-9247	Parsing bibliographic level of Sinopia Instance	=	DONE ⌄
☑	SVDE-9248	Parsing IntendedAudience of Sinopia Work	=	DONE ⌄
☑	SVDE-9255	Sinopia - Attributes and clusterization for WORK entity	=	DONE ⌄

SINOPIA integration: what's left to do

Thank you!