

Share-VDE major achievements in 2019

Initiated in 2016 as a Research and Development project, in 2019 the Share Virtual Discovery Environment in Linked Data initiative has moved progressively into production.

This extraordinary collaboration among the institutions involved - over thirty - and the intense dialog with the Linked Data for Production ([LD4P](#)) project has permitted the [Casalini Libri](#) and [@Cult](#) teams to reach significant milestones in this library community driven initiative.

Below is an outline of the major achievements made in 2019.

Announcements

- The National Library of Finland will be joining Share-VDE from 2020 and has committed itself to the initiative for three years. Following the adhesion of the National Library of Norway, we are very happy that another important European institution has joined the [Share Family](#).
- The University of Pennsylvania has established a partnership with Share-VDE to develop a customized skin that will embed a number of APIs to allow interoperability with BorrowDirect, Alma and Summon. An ad hoc skin of the new version of Share-VDE user interface is being designed with the partner company Samhæng.
- The bibliographic data of Share-VDE full members are online on the Share-VDE portal www.share-vde.org, with the only exception of newer members, the National Libraries of Norway and of Finland. The analysis of the NLN data is in an advanced phase and we are currently working on the ingestion of the NLN catalogue. A summary of the institutions whose data is published on the portal is available at the Info page <http://www.share-vde.org/sharevde/info.vm>.
- As part of the work on various [deliverables](#) for the institutions involved, Share-VDE has recently enhanced its triplestore capabilities in order to index

the bibliographical datasets not only of the full members, but also of the LD4P Cohort libraries in order to facilitate the [Sinopia dataflow](#). In total, the data of 23 libraries are currently represented: 100 million records, which have become approx. 24 billion quads (triples + provenance).

- The Share-VDE *Sapientia* Cluster Knowledge Base has been released earlier this year and now includes around 400 million triples.
- Both the bibliographical datasets and the Cluster Knowledge Base triplestore databases can be queried via the SPARQL endpoint (see http://bit.ly/SVDE_CKB_Stardog_and_queries) and via API through Stardog Studio, which is freely downloadable at <https://www.stardog.com/studio>. Advanced and customized API layers will be developed at a later stage.
- The [Kubikat-LOD](#) (Share-ART) prototype has been concluded. This is an important step for developing the application of Share-VDE in the domain of art libraries.

Technical developments

- Work is underway to create a revamped user interface that will increase the discovery potential of the Share-VDE infrastructure; a demo of the work undertaken is available at http://bit.ly/SVDE_prototype_20191202.
- The initial model of the *J.Cricket* Cluster Knowledge Base Editor is being analysed from a functional perspective, along with the design of its user interface. The result will be a collaborative module enabling the editing of the clusters of entities managed in Share-VDE (works, authors etc.). Further details can be found below.
- The Share-VDE SuperWork entity level has been correlated with the very recent Library of Congress Hub property. Analysis of similarities and possible interoperability layers is ongoing in the Work Identification Working Group. Further details can be found below.
- The management of the updates of Share-VDE library data has been completed as far as set-up of internal procedures. Before switching the whole process into production, we are running a testing phase that is being carried on together with a dedicated sub-group of Share-VDE members.

- Continuous improvements to, and bug fixing for the Share-VDE conversion tool and processes have been continued. The up-to-date status of the Share-VDE deliverables can be consulted [here](#).
- Share-VDE and LD4P are working together to optimize the interaction between the Share-VDE and Sinopia/Questioning Authority infrastructure, in order to make Share-VDE an authoritative source of data for the Sinopia linked data editor. A graphic summary of the interaction model is available at http://bit.ly/SVDE-Sinopia-QA_20191004.

Updates from the Working Groups

Advisory Council

- In conjunction with the activities of the various sub-groups, the Advisory Council has embraced the enhancement of Share-VDE entity model. You can find [here](#) a simplified example of Share-VDE entity model, and [here](#) an overview of the comparison among IFLA-LRM, BIBFRAME and Share-VDE models.

Authority/Identifier Management Services working group

- Based on previous in depth analysis, this working group is analysing new authority services, focussing on the major use cases to be discussed by the group and developed with higher priority.

Cluster Knowledge Base Editor Working Group

- The working group has carried out a very thorough analysis of the functional requirements and the features for the Share-VDE Cluster Knowledge Base editor, that has been named J.Cricket.
- We are now analysing the more granular functions of the J.Cricket CKB editor that need to be given higher priority in development.
- In the meantime, a dedicated sub-group is drafting the J.Cricket user interface with Share-VDE partner company Samhæng.

Work Identification Working Group

- The group is discussing whether to rename “Work Identification” “Entity Identification”, in order to reflect the broader the scope of the group itself.

- Following analysis and discussions among the Share-VDE community, we plan that one of the future enhancements of the data model will include the MasterInstance in order to support the relationship between the shared data elements and the local ones for the Instance layer (see the entity model http://bit.ly/SVDE_Data_model_2020). Further discussion will be carried on in the group.
- The working group agenda also includes the discussion of the Opus concept, which comprises the highest level of abstraction of the linked data entity models considered by Share-VDE (i.e. SuperWork or Hub). On a similar thread, the group is analysing similarities and possible interoperability layers between the Share-VDE SuperWork and Library of Congress Hub.

User Interface Working Group

- The design of the second version of the general Share-VDE user interface has been concluded. Samhæng is now working with the Share-VDE team to connect the components of the interface with the Share-VDE infrastructure.
- Specific features of the Share-VDE user interface are being analysed within ad hoc sub-groups, to which both Share-VDE and Kubikat-LOD group members are actively contributing.
- For a preview of the forthcoming new User Interfaces, refer to:
 - [Share-VDE: demo video](#) (a [sketch version](#) is also available);
 - [Share-ART: demo video](#).

APIs

- A draft list of desired APIs will be discussed as part of the Working Group activities and defined over the coming months. These lists will be intended to cover use cases/functions that the current SPARQL endpoint of Stardog triplestore does not provide. It is to be remembered that Stardog is providing a number of standard APIs to query SVDE data, as can be seen here:
 - https://www.stardog.com/docs/#_api_overview;
 - https://www.stardog.com/docs/#_programming_stardog.

Documentation

- The main reference document summarising the key Share-VDE documentation is http://bit.ly/SVDE_Doc_summary. Some of the documents listed are under revision, as they stem from the initial Research and Development phase of Share-VDE that began in 2016.

- The [Share-VDE onboarding set](#) contains useful tools and information for members about the steps needed to be onboarded in Share-VDE.
- The documents publicly available for promoting Share-VDE and the Share family are:
 - Share-VDE [brochure](#).
 - Share-VDE [presentation](#) giving an overview of the initiative and its core components.
 - [Textual dissemination documents in various languages](#).
 - [Graphic materials](#):
 - the [new logo](#) in various formats;
 - the [Share family stickers](#).

Webinar

- Jacquie Samples and Ian Bigelow recorded the webinar “[The Share Virtual Discovery Environment](#)”.

Presentations

The most recent events where Share-VDE has been presented are:

- [ALA June 2019](#).
- [IFLA August 2019](#).
- the [3rd Annual BIBFRAME workshop](#) in Europe, held in Stockholm on 17th-18th September. The presentations by Tiziana Possemato about Share-VDE and the slides of the BIBFRAME workshop [are available here](#).
- In Stockholm, following the BIBFRAME workshop, a dedicated Share-VDE workshop has been held. The outcomes can be consulted [here](#).
- [Access Canada](#) conference, from 30th September to 2nd October in Edmonton (Canada). The joint presentation by Ian Bigelow, Abigail Sparling and Michele Casalini [is available here](#).
- [MTSR](#), Metadata and Semantics Research Conference, 28th-31st October, Rome.
- [SWIB](#), Semantic Web in Libraries, 25th-27th November, Hamburg.

Please write to info@share-vde.org with any enquiries.