Points from BIG discussions of Interoperability with Flexibility

BIBFRAME Update Forum
Monday, January 30, 2023

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BIBFRAME Interoperability Group (BIG)

Active since July 2022

Result of the BIBFRAME Data Exchange Meeting, a virtual meeting organized by the PCC, September 9-10, 2021, to discuss exchange of BIBFRAME data between systems and implementations

Major challenge identified:
Interchange of BIBFRAME data caused by different choices in expressing the BIBFRAME ontology in original data creation and different results from data conversion from MARC

Approved by PCC Policy Committee (PoCo): January 2022

Current membership

BIG Wiki

https://wiki.lyrasis.org/pages/viewpage.action?pageId=249135298

Terms of Reference (TOC)/Charge

Work may include the following:

● Define a standard BIBFRAME "shape" to support data reuse including conversion to and from other formats
● Explore defining core BIBFRAME elements necessary for data exchange
● Surface issues regarding the use of the Official RDA with BIBFRAME and propose strategies for their resolution
● Collaborate and communicate with other groups working in the area of BF interoperability to ensure the ability to reuse BIBFRAME created in one community in other BIBFRAME stores.
● Examine the work accomplished by the Communication Working Group and apply to this charge where appropriate
● Gather use cases as necessary to inform decision making, expanding on the efforts of the Use Case Working Group and others
● Provide an avenue for other interested parties to contact the BIBFRAME Interoperability Group and/or reach out to other stakeholders

Finding Our Footing

Review of existing work, including use cases

group members presented on their implementations and discussed their requirements for interoperability and issues encountered

Surveyed BIG members on cataloging standards background

BIBFRAME Implementation survey

Implementation Survey Questions and Analysis

11 implementations

Significantly different model from bf:2.0:
50% yes — svde:Opus and svde:Work, bflc, local extension vocabularies or BIBFRAME lite

BIBFRAME version base: *Mostly 2.0, one 2.1 and one in the process of moving to 2.1*

MARC to BIBFRAME processing and version: *RDFizer tool (SVDE), local conversion logic (Sweden, Finland), LC MARC2BIBFRAME convertor*

BIBFRAME to MARC processing and version: *logic based on LC's conversion, local conversion logic (Sweden)*

Documentation & Sample data

Getting to Work

Building on the work of the Strawperson Working Group:

"Provide an interim solution for those that want to exchange BIBFRAME data in the short term while the PCC works on longer-term work through their working group for BIBFRAME Data Exchange."

Based on Sinopia PCC templates (monographs)

SHACL (Shapes Constraint Language) shapes

SHACL Validation

SHACL Validation

Some bigger questions surfaced:

Do we:

- focus on legacy data and/or new cataloging? There may be different levels of interoperability
- continue to focus on monographs first?
- exclude or include extension ontologies? E.g. bflc, Performed Music Ontology or the Art & Rare Materials Ontology?
- focus on resources traditionally cataloged in MARC? What about other data stores such as IRs?

SHACL Validation

Some different practices surfaced, e.g.:

adminMetadata on bf:Work, bf:Instance or both?

xsd:string literals or literals with a language tag?

Include both classes and subclasses or do we expect systems to be subclass aware?

URI required ; labels "nice to have"?

2nd Linked Data Summit

Promoted by: BIBFRAME Interoperability Group (BIG), Library of Congress (LC), Linked Data for Production (LD4P), OCLC, Share-VDE (SVDE)

November 7-8, 2022, Library of Congress

Outcomes assigned to BIG:
 a) Exploration of Shapes in the validation of PCC BF data
 b) Further exploration of the <u>interchange model</u> (developed by Jim Hahn)

Developing a Work Plan – In Process

1) Recommendations must be readable by technical staff and librarians, but preferably updates would need to be made in only one place: Investigate how to produce tabular format, possibly using DC TAP, and generate SHACL. Also looking into FRESNEL and other options **(in process)**
2) Codify interoperability scope (formats/extensions/legacy or new, etc) **(in process)**
3) Define Core BIBFRAME elements necessary for data exchange (based on implementation survey)
4) Identify and document best practices for technical aspects of interchange
5) Define standard BIBFRAME "shape"
6) PCC data as a test case
7) Share with consultants for testing and validation of assumption

The final work plan and timeline will be made available on the BIG Wiki

References

BIBFRAME Data Exchange Meeting Summary (2021)
https://www.loc.gov/aba/pcc/bibframe/PCC-BIBFRAME-Data-Exchange-Summary.pdf

BIBFRAME for Communication (Communication Working Group; 2022)
https://docs.google.com/document/d/1CZNCSAszm4zbzUbjtoQjDQ8C4gJ6zchALG2UrynrPOw/edit?usp=sharing

Use Case Working Group Final Report (2022)
https://docs.google.com/document/d/1n-Cmm8yfGnWp2mig2bpmvqFcKlbElQW3ud4jjSR_c5Y/edit?usp=sharing

Strawperson Group output (2022)

Linked Data Summit Summary (2022)

Shapes Constraint Language (SHACL)

FRESNEL – Display Vocabulary for RDF

Questions?