From Idea to Implementation: BIBFRAME Becomes Reality

BIBFRAME Resource Description with Sinopia: New Data & New Opportunities

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Requirement: Cataloguing Editor for Linked Data

For those working on implementation, need to move beyond converting data and start describing resources in RDF (BIBFRAME more specifically in this case).

Simple enough right? Except:

- New technology
- New data
- Complex transitional environment
  - Need to support new and legacy systems
Connecting systems through transition

- Data Flow and Metadata Reuse (3 year goal)
- Entity Management in J. Cricket
- Sapientia +J Cricket
- Bf-bf harmonization
- Share-VDE
- Test LD Discovery; Access to Data
- Sirsi
- Load Bulk MARC files to Sirsi (will be converted to bf)
- Sinopia
- Original and copy cataloguing in Sinopia
- bf2mrc
- mrc2bf
- bf2mrc
Sinopia

• Developed as part of the Linked Data for Libraries (LD4P) grant series funded by the Mellon Foundation

• Linked data creation environment
  • Linked data template maker & editor
  • Lookups to linked vocabularies via Questioning Authority (QA)
  • Database of templates & descriptions created by members

• Open source
  • Web-based
  • Anyone may join
    • “group membership” allows for restrictions on editing & saving, but not on re-use of templates or descriptions

Sinopia Version 3.17.5 highlights
For complete release notes see the Sinopia help site.

  • Language detection and suggestion
  • Sinopia/Symphony integration for Stanford users
  • Templates are included in Sinopia search
  • Can set literal field to default to current date or user ID

slide.sinopia.io
sinopia.io

Sinopia

- Templates may use any RDF-based ontology, though the database search favors BIBFRAME and to a lesser extent RDA/RDF
- UAL uses BIBFRAME as its base ontology, with the Library of Congress extension (bflc), along with the Program for Cooperative Cataloging (PCC)
- Templates also act as metadata application profiles for their users
  - Properties/classes to be used
  - Modeling of RDF
  - Required/Repeatable/Ordered
  - Vocabularies
  - Defaults
  - Links to content standards (e.g., RDA)
  - Other help information

New Data

BIBFRAME RDF output from Sinopia

Sinopia Middleware

Cataloger initiates publish-to-ils workflow with a button click

Sinopia API used to update RDF document in backend MongoDB using BF Instance URI

Sinopia API generates a SNS message and sends it to a SQS queue

AWS SNS/SQS

Message Queue

Apache Airflow

- Institutional DAG (Directed Acyclic Graph)
- SQS Sensor Task monitors for SQS Message queue
- When message comes in, BF Instance is sent to rdf2marc
- MARC converted to Symphony JSON
  - Login and create/overlay record with Symphony Web API calls
  - Retrieves cat-key
  - cat-key is added Instance RDF

MARC JSON

Sinopia MARC Output

BF Instance for a book
(Stanford:bf2:Monograph:Instance)

Converted Sinopia data in FOLIO Inventory

Sinopia

- Original and copy cataloguing with BIBFRAME
- Connection with Share-VDE to populate a larger data pool, including the PCC data pool
- Send bf: data to OCLC in RDF
- Sinopia Middleware allowing for BIBFRAME to generate MARC for use in existing ILS

This means that we can look forward to changing original and copy cataloguing workflows to Sinopia (BIBFRAME), while still populating our Sirsi MARC dataset, and contributing to PCC.
Sidereus nuncius

Astronomical treatise of Galileo.

Sidereus Nuncius is a short astronomical treatise published in New Latin by Galileo Galilei on March 13, 1610. It was the first published scientific work based on observations made through a telescope, and it contains the results of Galileo's early observations of the imperfect and mountainous Moon, the hundreds of stars that were unable to be seen in either the Milky Way or certain constellations with the naked eye, and the Medicean Stars that appeared to be circling Jupiter. – Wikipedia

This is part of the series Early European books, Early English books, 1641-1700, Warnock library, Classici Ricciardi, Early English books online, Saggi per il nostro tempo, Science et humanisme, and Uraš julkaisuja.
Thank You!
Hopefully this ruff overview has been helpful

While Nancy couldn’t be here, she provided an excellent presentation on the amazing work at Stanford at the BIBFRAME Workshop in Europe, which can be found here: https://www.casalini.it/bfwe2022/
*Thank you Nancy for reuse of some of the slides from this talk