Library of Congress's Bibliographic Framework Initiative:

An introduction to exploring flexibility in music cataloging

#bibframe
Intro

BIBFRAME
  Objectives, Expectations, Requirements
  A new ecosystem
  Core Classes

Music in BIBFRAME

Current questions/work
What is BIBFRAME?

The Bibliographic Framework Initiative will re-imagine and implement a bibliographic environment for a post-MARC world.

Key dates:

May 2011 – Initiative announced.

October 2011 – LC publishes general plan

May 2012 – Zepheira LLC contracted to evaluate related initiatives and data modeling

November 2012 – LC publishes high-level model document

January 2013 – LC publishes http://bibframe.org/ which includes a draft vocabulary

August 2013 – Primary Use Cases and Requirements formally recorded and established

January 2014 – Vocabulary 1.0. Implementation experiments begin.
Before BIBFRAME

ca. 2007-2010

VIAF
Virtual International Authority File

VIAF: The Virtual International Authority File

The VIAF™ (Virtual International Authority File) combines multiple name authority files into a single OCLC-hosted name authority service. The goal of the service is to lower the cost and increase the utility of library authority files by matching and linking widely-used authority files and making that information available on the Web.

URIs for People (and, later, Organizations, Places, etc.)
Before BIBFRAME

2009

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28 February 2014
Music Library Association, Annual Meeting
Atlanta, GA
Before BIBFRAME

2011

THE BRITISH NATIONAL BIBLIOGRAPHY
as Linked Open Data

Welcome to bnb.data.bl.uk

The BNB Linked Data Platform provides access to the British National Bibliography published as linked open data and made available through SPARQL services. Two different interfaces are provided: a SPARQL editor, and /sparql a service endpoint for remote queries. Alternatively, use the search box below to enter a plain text term.

Bibliographic data!

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Before BIBFRAME

2011-2012

URIs for People, Organizations, Places, etc.
Before BIBFRAME

2011-2012

URIs for People, Organizations, Places, etc.
And Works.

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Additional efforts:

AGROVOC (FAO)
National Diet Library (Japan)
Spanish National Library
Dewey Decimal Classification
Europeanna
STW Thesaurus for Economics
USDA National Agricultural Library
Getty Vocabularies
Hungarian National Library
Norwegian University of Science and Technology

And many more...
Linked Music

2007

DBTune.org
DBTune - Serving music-related RDF since 2007

Musicbrainz data, BBC sets, Jamendo, etc.

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Musicbrainz data, JISC funded.
Linked Music

2011-2012

Linked Jazz

Funded through an OCLC/ALISE Library and Information Science Research grant.

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Leader: 01423cjm a22003971a 4500
001 12050461
007 sd bsmennmplue
008 821022r19791979gw syn fi
028 00 $aARL2-3461$bRCA Red Seal
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245 00 $aSymphonie Nr. 9 D-dur$hsound recording /$cGustav Mahler.
300 $a2 sound discs (92 min.) :$b33 1/3 rpm, stereo. ;$c12 in.
306 $a013137
500 $aNotes by Uwe Kraemer in German ([4] p.) laid in container.
511 0 $aPhiladelphia Orchestra ; James Levine, conductor.
650 0 $aSymphonies.
700 1 $aLevine, James,$d1943-
710 2 $aPhiladelphia Orchestra.
740 0 $aLevine conducts Mahler, Symphony no. 9.
<table>
<thead>
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<th>01423cjm a22003971a 4500</th>
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<tbody>
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Increasing User Expectations

URIs, URIs, URIs

Reduced ambiguity

Decentralization of data

Ability to annotate or otherwise augment data

Flexibility – for future cataloging and uses

Leverage technology while leaving librarians to their areas of expertise

Web-ready/web-accessible – more openness

What is BIBFRAME?

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Atlanta, GA
What is BIBFRAME?

Requirements/expectations:

- Content model agnostic (RDA, DACS, CCO)
- Must support RDA cataloging
- Description and management for all types of library holdings
  - Traditional materials, such as books and serials,
  - But also digital materials, such as born-digital video, ebooks.
- Provision for data that supports bibliographic description
  - Authority data, Holdings, Classification
- Replace MARC
Bibliographic Framework Initiative and Linked Data

Linked Data
- RDF Vocabulary/Data Model
- Network-based technological protocols
- For the web, on the web

Relationships
- Links replace strings = Reduced maintenance
- URIs = authority
- Atomicity = flexibility

Relationship to MARC
- MARC has provided means for data representation
- MARC has been a suitable communication format
The MARC Ecosystem

Data exchange: Present day

Machine understands gobbledygook.

Patron understands, but...

Developer works with...

Cataloger works with...

OPAC

Z39.50

SRU

Interface for...

ILS Database

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BIBFRAME Ecosystem

Data exchange: The future?

Machine understands.

Patron understands.

Developer works with...

Cataloger works with...

ILS Web Layer

ILS Database

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Be on the Web....

Structured data is exposed at the ILS Web Layer.

HTTP is the transport protocol. (Versus Z39.50)*

ILS Web Layer itself becomes a service. Customary OPAC, of course, but also:

- Search API
- Data access APIs
- Web triggers send, receive packets
BIBFRAME Ecosystem

Be on the web...
Bringing the data out of the silo.

The possibility with combining data representation & communication.

Today

Predictably Irrational: The Hidden Forces That ... - Barnes & Noble
www.barnesandnoble.com/.../predictably-irrational-dan-....
★★★★★ Rating: 4 - 177 votes - $9.91 to $11.49
"PREDICTABLY IRRATIONAL is a charmer-filled with clever experiments, engaging ideas, and delightful anecdotes. Dan Ariely is a wise and amusing guide to ...
Be on the web...
Bringing the data out of the silo.

The possibility with combining data representation & communication.

Tomorrow

Predictably Irrational: The Hidden Forces That ...- DCPL

catalog.dclibrary.org/.../Record/u682456...

Call Number: 330.01 A698
Special Location: SE Library, NE library, MLK...

“Predictably Irrational is a charmer-filled with clever experiments, engaging ideas, and delightful anecdotes. Dan Ariely is a wise and amusing guide to ...
Core Classes
Resource reflecting the conceptual essence of the cataloged item
BIBFRAME

Resource reflecting a material embodiment of a BIBFRAME Work

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Resource reflecting key authority concepts that have defined relationships to Works and Instances
BIBFRAME

Authority

For a

Person
Organization
Family
Meeting
Jurisdiction
Place
Topic
Temporal Concept

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BIBFRAME

Authority

A Local Access Point

May have its own HTTP URI

Enables data aggregation
Authority

a bf:Person ;
bf:authorizedAccessPoint "Darwin, Charles, 1809-1882" ;
bf:hasAuthority <http://id.loc.gov/authorities/names/n78095637> ;

A Local Access Point

May have its own HTTP URI

Enables data aggregation

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BIBFRAME

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BIBFRAME

Annotation

Assertions about the other core class elements

Works – reviews, abstract, excerpts

Instances – holdings, book cover images

Name authority – author information

Administrative metadata

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Annotations (cont'd)

Annotations matter when it is important to know who makes an assertion.

Annotations are no less important than Work or Instances or Authorities.

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Annotations (cont'd)

Annotations are *additional* assertions
- Local, as in holdings
- Local, selected reviews
- External, publisher description

By contrast

Works and Instances *could* be controlled.

Authorship does not change. Place of Publication doesn't change.
BIBFRAME & Music

000  01748cjm a2200433 a 4500
007  sd bsmenmmlue
008  050106q19601969nyuzzn| efhi | d
028  $bMonitor$aMCS 2070
045  $bd1855$bd1890
048  $aka01$asa01$asc01
100  $aDvořák, Antonín,$d1841-1904.
240  $aTrios,$mpiano, strings,$nop. 90,$rE minor
245  $aTrio in E minor, opus 90$h[sound recording] :$b"Dumky" /
     $cAntonín Dvořák. Trio in G minor, opus 15 / Bedřich Smetana.
260  $aNew York, N.Y. :$bMonitor,$c[196-?]n
300  $al sound disc :$banalog, 33 1/3 rpm, stereo. ;$c12 in.
306  $a003313$a002910
500  $aProgram notes by Alice Bunzl on container.
511  $aDavid Oistrakh, violin ; Sviatoslav Knushevitzky, violoncello ;
     Lev Oborin, piano.
650  $aPiano trios.
700  $aSmetana, Bedřich,$d1824-1884.$tTrio,$mpiano, strings,$nop. 15,$rG minor.

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What do we have, potentially?

3 Works
1 Instance (but could be another 2)

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2 Works

Dvořák, Antonín, d1841-1904.

Trios, mpiano, strings, nop. 90, rE minor

Trio in E minor, opus 90, h[sound recording] : b"Dumky" /
cAntonín Dvorák. Trio in G minor, opus 15 / Bedřich Smetana.

New York, N.Y. : bMonitor, c[196-?]

1 sound disc : banalogue, 33 1/3 rpm, stereo. ; c12 in.

Program notes by Alice Bunzl on container.

David Oistrakh, violin ; Sviatoslav Knushevitzky, violoncello ;
Lev Oborin, piano.

Piano trios.

Smetana, Bedřich, d1824-1884. tTrio, mpiano, strings, nop. 15, rG minor.

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BIBFRAME & Music

Trios, piano, strings, op. 90, E minor
Trio in E minor, opus 90, "Dumky" / Antonin Dvorak.
Trio in G minor, opus 15 / Bedrich Smetana.

New York, N.Y. : Monitor, [196-?]
1 sound disc : analog, 33 1/3 rpm, stereo. ; 12 in.

Program notes by Alice Bunzl on container.

David Oistrakh, violin; Sviatoslav Knushevitzky, violoncello; Lev Oborin, piano.

Piano trios.

Smetana, Bedrich, d1824-1884. Trio, piano, strings, op. 15, G minor.
Trio in E minor, opus 90

"Dumky" /
Antonín Dvořák
Trio in G minor, opus 15 / Bedřich Smetana

New York, N.Y.

1 sound disc: analog, 33 1/3 rpm, stereo. ; 12 in.

Program notes by Alice Bunzl on container.

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Piano trios.

Smetana, Bedřich, d1824-1884. Trio, piano, strings, op. 15, G minor.
BIBFRAME & Music

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008 050106q19601969nyuzzn| efhi | d
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306 $a003313$a002910
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511 $a David Oistrakh, violin ; Sviatoslav Knushevitzky, violoncello ; Lev Oborin, piano.
650 $a Piano trios.
700 $a Smetana, Bedřich, d 1824-1884. $t Trio, $m piano, strings, $nop. 15, $r G minor.

Instance information, but...

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BIBFRAME

- **Work**
  - Album: Trios
  - contains:
    - **MusicalComposition**
      - **Smetana's**:
        - Trio, op. 15, G minor
      - **MusicalComposition**
        - **Dvorak's**:
          - Trio, op. 90, E minor
  - instance of:
    - **CD**
  - performer:
    - **Person**

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BIBFRAME

Work

Album: Trios

CD

MusicalPerformance

Dvorak's: Trio, op. 90, E minor

Smetana's: Trio, op. 15, G minor

Person

performer

performer

BIBFRAME

MusicalComposition

Smetana's: Trio, op. 15, G minor

Dvorak's: Trio, op. 90, E minor

contains

Instance

contains

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BIBFRAME

Current and Recent Work

- Starting to test implementation ideas
- Continue to add to vocabulary
- Discussion papers
- Communication use cases (OAI, Z39.50, triggers)
  - See the “BIBFRAME Use Cases and Requirements” document
- Prototype BIBFRAME Input Tool
  - Experimental implementation of profiles
- Aggregates (serials and collections)
- Experimenting, testing implementation scenarios
Vocabulary

The BIBFRAME Vocabulary is comprised of the RDF properties, classes, and relationships between and among them. The three available vocabulary views are described below.

See also: Vocabulary Description | Terminology and Conventions | BIBFRAME Primer Document [PDF, 2.7 MB]

Model View

Using the BIBFRAME model as a starting point, enter the vocabulary through the major framing classes, drilling down into associated properties. Each class view includes properties inherited from Resource, any parent class, specific properties for the class, as well as additional specific subclasses.

Category View

This display of the BIBFRAME vocabulary presents all of the properties, sorted into broad categories like titles, identifiers, relationships, etc. Each category includes properties inherited from Resource, any parent class, specific properties for the class, as well as additional specific subclasses.

List View

This single-page view presents the entire vocabulary on one page with an ordered list of classes and properties, followed by more detailed information about each. Links are internal to the page, and the browser back button can reverse your navigation on the page.

Select Model View »

Select Category View »

Select List View »
# BF Model & Vocab

## Work - Class

Resource reflecting a conceptual essence of the cataloging resource.

---

### Properties used with Resource: Any BIBFRAME object.

<table>
<thead>
<tr>
<th>Property</th>
<th>Label / Description</th>
<th>Subproperty Of</th>
<th>Expected values</th>
</tr>
</thead>
<tbody>
<tr>
<td>authorizedAccessPoint</td>
<td>Authorized access point / Controlled string form of a resource label intended to help uniquely identify it, such as a unique title or a unique name plus title.</td>
<td></td>
<td>Literal</td>
</tr>
<tr>
<td>identifier</td>
<td>Identifier / Number or code that uniquely identifies an entity.</td>
<td></td>
<td>URL ; Identifier</td>
</tr>
<tr>
<td>label</td>
<td>Property value / Text string expressing the property value.</td>
<td></td>
<td>Literal</td>
</tr>
<tr>
<td>relatedTo</td>
<td>Related to another resource / Any relationship between resources.</td>
<td></td>
<td>URL ; URL</td>
</tr>
</tbody>
</table>

---

### Properties used with Work: Resource reflecting a conceptual essence of the cataloging resource.

<table>
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</thead>
<tbody>
<tr>
<td>absorbed</td>
<td>Absorbed / Work that has been incorporated into another Work</td>
<td>precedes</td>
<td>URL ; Work</td>
</tr>
<tr>
<td>absorbedBy</td>
<td>Absorbed by / Work that incorporates another work.</td>
<td>succeeds</td>
<td>URL ; Work</td>
</tr>
<tr>
<td>absorbedInPart</td>
<td>Absorbed in part / Work that has been partially incorporated into another work.</td>
<td>precedes</td>
<td>URL ; Work</td>
</tr>
</tbody>
</table>
Review the vocabulary, compare MARC to BIBFRAME, transform your data to BIBFRAME:
http://bibframe.org/

Join the conversation:
http://listserv.loc.gov/listarchs/bibframe.html

Grab some code:
https://github.com/lcnetdev/marc2bibframe

Do some implementation testing!
http://www.loc.gov/bibframe/implementation/

Thanks. Questions?

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