

Library of Congress BIBFRAME Pilot: Phase Two

ALCTS series: From MARC to BIBFRAME

Wednesday, March 7, 2018
2:00 PM-3:00 PM (Eastern)

Presenters

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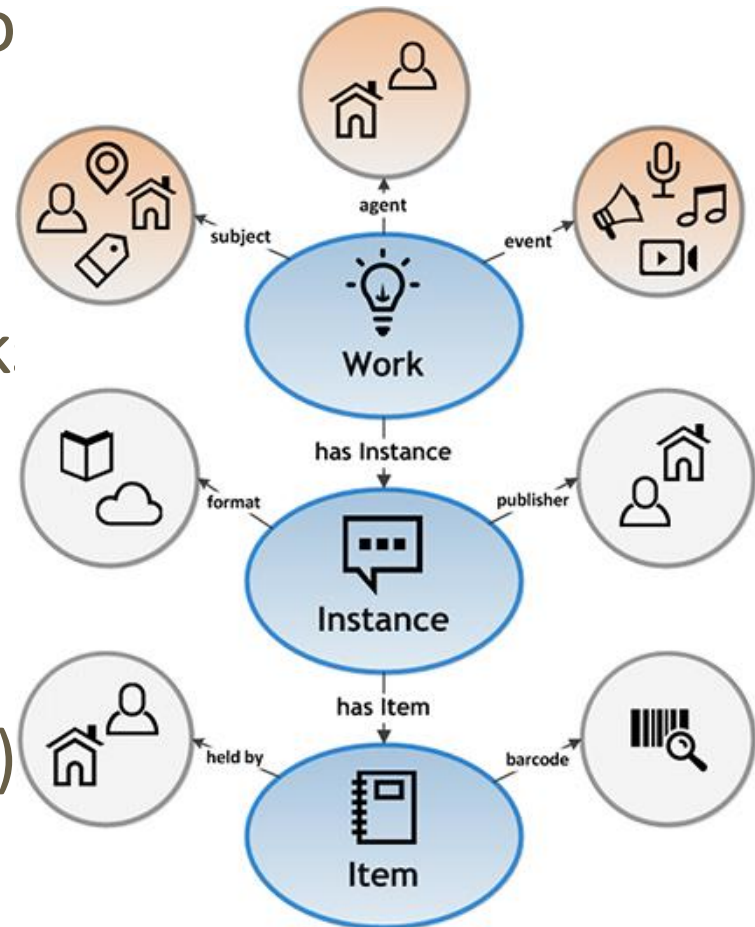


Topics To Cover

- BIBFRAME 2.0 Pilot Status (McCallum)
- BIBFRAME Pilot: Phase Two Goals (Cannan)
- BIBFRAME Editor (Williamschen)
- BIBFRAME 2.0 Database (Frank)

Where we are with BIBFRAME 2.0 Pilot Implementation

- BIBFRAME model revisio
- 2.0 Model →
- Innovative and Simple
 - **Works** (FRBR/RDA Work and Expressions)
 - **Instances** (FRBR/RDA Manifestations)
 - **Items** (FRBR/RDA Items)



BIBFRAME 2.0 Pilot

- BIBFRAME 2.0 vocabulary
 - Heavier influence of RDA
- Specifications for conversion of MARC to BIBFRAME 2.0
 - Patterns in MARC
 - Duplication, forms of expression, “abundance” of data
 - Leaving some behind?

BIBFRAME 2.0 Pilot

- Conversion programs for MARC to BIBFRAME 2.0
- Merge and reconcile data
 - MARC name/title Authorities became BIBFRAME Work descriptions
 - MARC Bibliographic records were split into BIBFRAME Work and Instance descriptions
 - Merging and shifting of data

BIBFRAME 2.0 Pilot

- Goal: Realistic cataloging environment
 - Creating description of resource in BIBFRAME first
 - Converted whole MARC catalog to BIBFRAME to catalog against
 - 17 million MARC bibliographic records converted to BIBFRAME Works, Instances, and Items
 - 1.2 million uniform title authority records converted to BIBFRAME Works
 - Merged and matched BIBFRAME Works
 - Continuing to refine ...

BIBFRAME 2.0 Pilot

- Revamping the BIBFRAME Editor
 - Lessons from the first Pilot
 - Updating all the profiles
 - Enable input of new name authorities in BIBFRAME system
- Expanding ID.loc.gov (LC's Linked Data Service)
 - More term lists for the Editor
- Special task – Complete restructuring of infrastructure
- Documentation and training

BIBFRAME 2.0 Pilot

- So where are we:
 - 60 catalogers in pilot
 - All forms of material
 - Continuous discover and fix conversions and merges
 - Continuous adjustment of editor
- LC sees pilots as essential for understanding the future:
 - Migration of MARC to a new platform
 - Libraries as part of the Linked Data environment
- Key web site www.loc.gov/bibframe

BIBFRAME Pilot: Phase Two

Goals

Goals are coming from three sources:

1. ABA Director
2. Network Development and MARC Standards Office (NDMSO)
3. Cooperative and Instructional Programs Division (COIN)
4. NDMSO/COIN) combined

BIBFRAME Pilot: Phase Two Goals

ABA Director's goals:

1. Determine if BIBFRAME is “scalable” – can BIBFRAME be applied to a large and complex body of data?
2. Determine if the Library of Congress will pursue BIBFRAME as its Linked Data pathway and ultimate replacement for MARC
3. Announce decisions

BIBFRAME Pilot: Phase Two Goals

NDMSO goals:

1. Provide a realistic cataloging environment for BIBFRAME Pilot participants
2. Expand and advance database conversion
3. Increase use of linked data resources from Linked Data Services (id.loc.gov)
4. Explore and enhance cross-system flows
5. Refine synchronization between the BIBFRAME 2.0 Database and the MARC-based Voyager ILS database

BIBFRAME Pilot: Phase Two

Goals

COIN goals:

In addition to training participants to work in Phase Two, COIN assists NDMSO staff to:

1. Improve the BIBFRAME Save, Retrieve, and Edit functions
2. Allow the importing of external bibliographic records
3. Permit native BIBFRAME descriptions to be added to the BIBFRAME database
4. Limit the romanization of bibliographic data

BIBFRAME Pilot: Phase Two Goals

Combined COIN/NDMSO goals:

1. Enable description of Agents in BIBFRAME
2. Continue to improve the BIBFRAME Editor

BIBFRAME Editor Profiles

- LC BIBFRAME Editor features
 - Data entry
 - Customized, pre-populated data, popups
 - Type-ahead options for longer lists
 - Names, subjects, form/genre, language, work titles
 - Dropdowns menus for shorter lists
 - Media, color content, polarity, audio/video characteristics
 - RDA rules are hot-linked to element labels
 - We continue to work with the pilot participants to refine them

BIBFRAME Editor Profiles

Create Resource

Monograph ▾

Notated Music ▾

Serial ▾

Cartographic ▾

Sound Recording: Audio CD ▾

Sound Recording: Audio CD-R ▾

Sound Recording: Analog ▾

Moving Image: BluRay DVD ▾

Moving Image: 35mm Feature Film ▾

Prints and Photographs ▾

Rare Materials ▾

Create Resource







Monograph ▾

Instance

Work



BIBFRAME Editor (snippets)

Title Information

Instance Title	Variant Title	Parallel Title	Transliterated Title
דג חי או דג Net  	מאבק לטוהר התקשורת  		Dag hai o dag Net  

Statement of Responsibility Relating to Title Proper (RDA 2.4.2)



Statement of Responsibility Relating to Title Proper (RDA 2.4.2)

קובי לוי ; איורים, יוני גרשטיין, אבישי חן  

Edition Statement (RDA 2.5)


Edition Statement (RDA 2.5)

Publication, Distribution, Manufacture Statements

Publication Activity	Distribution Activity	Manufacture Activity
		תשרי תשע"ו, [Tel Aviv], [עמותת "שובה ישראל ונשובה לתורה"]  

Mode of Issuance (RDA 2.13)

Mode of Issuance (RDA 2.13)



single unit 

Identifier for the Manifestation

ISBN	Other Identifier	Local system number


Notes about the Instance

Note
















"1"--Spine  

Media type (RDA 3.2)

Media type (RDA 3.2)

unmediated 

BIBFRAME Editor (snippets)







Title Information	Instance Title	Variant Title	Parallel Title
	Scrubs  	Scrubs. Season 1-9  	
Statement of Responsibility Relating to Title Proper (RDA 2.4.2)	Statement of Responsibility Relating to Title Proper (RDA) 		
	Doozer ; Touchstone Television ; ABC Studios ; [Towers Pro...  		
Edition Statement (RDA 2.5)	Edition Statement (RDA 2.5) 		
	Ultimate collector's edition  		
Publication, Distribution, Manufacture Statements	Publication Activity	Distribution Activity	
	Manufacture Activity		
	Buena Vista Home Entertainment, Inc.: Burbank, California,...  		
Copyright Date (RDA 2.11)	Copyright Date (RDA 2.11) 		
	©2010  		

BIBFRAME Editor (snippets)

Sound Characteristics

Sound Characteristics Playback Channels

Special Playback Characteristic

digital   soundCharacteristic   Dolby  

Video Characteristics




Broadcast Standard

NTSC  

Digital File Characteristics


Digital Characteristics File type

Regional Encoding

DVD video   video file   region 1  


Persons, Families, Corporate Bodies Associated with the Manifestation (RDA 21.1.2)

Contribution

Buena Vista Home Entertainment (Firm), Film distributor  

Source Consulted (RDA 5.8.1.3)

Source Consulted

Videodisc container; Internet movie database WWW site, vie... 



BIBFRAME Editor (snippets)

BIBFRAME Item

Held by

Held by +

DLC  

Shelving call numbers

LC shelfmark

Electronic location

Electronic location +

Held in sublocation

Held in sublocation +

Barcode

Barcode

Notes about the item

Note

Lending, Reproduction, and Retention Policies

Lending or Access Policy

Use or Reproduction Policy

Retention Policy

Enumeration And Chronology of Item

Enumeration

Chronology

[Custodial History of Item \(RDA 2.18\)](#)



Custodial History of Item (RDA 2.18) +

Immediate Source of Acquisition of Item

Immediate Source of Acquisition

BIBFRAME Editor (snippets)

BIBFRAME Item

Held by	Held by	+	
	DLC  		
Location	Location	+	
Agents associated with Item	Contribution		
Custodial History (RDA 2.18)	Custodial History (RDA 2.18)	+	
Immediate Source of Acquisition	Immediate Source of Acquisition		
Notes about the Item	Note		
Form of Item	Form/Genre	RBMS term	
Barcode	Barcode		
Shelfmarks	LC shelfmark	Accession or copy number	
Usage and access policy	Lending or Access Policy	Use or Reproduction Policy	Retention Policy
Collection	Collection	+	

BIBFRAME Editor

Language of Expression (RDA 6.11)

Language of Content (RDA 7.12) **languages**

Script (RDA 7.13.2)

Illustrative Content (RDA 7.15)

- Englisch
- English
- English, Middle (1100-1500)
- English, Old (ca. 450-1100)

Broadcast Standard ×

Broadcast Standard

Broadcast Standard (RDA 3.18.3)

Details of Broadcast Standard

mbroadstd

- HDTV
- NTSC
- PAL
- SECAM

BIBFRAME Editor

Subject of Work ×

Subject of Work

Search
LCSH/LCNAF

Search Subject
Components

Input Subject +
Subdivision string

Subject source

library of congress|Gershwin Prize for Popular Song

LCSH

Library of Congress Gershwin Prize for Popular Song

Library of Congress James Madison Memorial Building (Washington, D.C.)

Library of Congress Mass Book Deacidification Facility (Md.)

Library of Congress Thomas Jefferson Building (Washington, D.C.)

LCNAF

Library of Congress

Library of Congress Hispanic Cultural Society

RDA 7.9)

Dissertation

BIBFRAME Editor

The screenshot displays the BIBFRAME Editor interface. At the top, there is a header "Form/Genre" with a close button (x). Below this, the main area is titled "Form/Genre". A search bar labeled "Search LCGFT (RDA 6.3)" contains the text "biographical comics". A dropdown menu is open, listing the following LCGFT options: "Biographical comics", "Biographical drama", "Biographical fiction", "Biographical films", "Biographical poetry", "Biographical radio programs", "Biographical television programs", and "Biographies". To the right of the dropdown, there are two buttons: "Cancel" and "Save changes". In the background, partially obscured, are other form elements including "(RDA 6.4) Date of Wo", "(RDA 6.5) Place ASSO", and "ie Content Geographi".

Data Output from the Editor

```
<bf:language>
  <bf:Language rdf:about="http://id.loc.gov/vocabulary/languages/zxx">
    <rdfs:label xml:lang="en">No linguistic content</rdfs:label>
  </bf:Language>
</bf:language>
```

```
<bf:soundContent>
  <bf:SoundContent rdf:about="http://id.loc.gov/vocabulary/msoundcontent/sound">
    <rdfs:label xml:lang="en">sound</rdfs:label>
  </bf:SoundContent>
</bf:soundContent>
```

```
<bf:title>
  <bf>Title rdf:nodeID="bnodebcDaPpatCVnyAcVJZN7VpC">
    <bf:mainTitle>Scrubs</bf:mainTitle>
  </bf>Title>
</bf:title>
```

BIBFRAME 2.0 Database

- Conversion processes
- Ingest streams
- Provenance

Much more to be determined in the Library of Congress BIBFRAME Pilot, Phase Two

BIBFRAME 2.0 Database

050	0	0	‡a TK5105.88815 ‡b .S469 2015
100	1		‡a Sikos, Leslie F., ‡e author.
245	1	0	‡a Mastering structured data on the semantic web : ‡b from HTML5 microdata to linked open data / ‡c Leslie F. Sikos, Ph.D.
264		1	‡a New York, NY : ‡b Apress, ‡c [2015]
300			‡a xviii, 233 pages : ‡b illustrations ; ‡c 25 cm
336			‡a text ‡b txt ‡2 rdacontent
337			‡a unmediated ‡b n ‡2 rdamedia
338			‡a volume ‡b nc ‡2 rdacarrier
490	0		‡a The expert's voice in Web development
504			‡a Includes bibliographical references and index.
650	0		‡a Semantic Web.
650	0		‡a Linked data.
650	0		‡a Electronic data processing ‡x Structured techniques.

BIBFRAME 2.0 Database

The screenshot shows the BIBFRAME Database search results page. At the top, there is a navigation bar with the Library of Congress logo and links for 'ASK A LIBRARIAN', 'DIGITAL COLLECTIONS', and 'LIBRARY CATALOGS'. Below this is a breadcrumb trail: 'The Library of Congress > BIBFRAME Database > Search Results'. The search input field contains '2016440906' and the search type is set to 'Everything'. The search results are displayed under the heading 'BIBFRAME Database' with the subtext 'Results for "2016440906"'. On the left side, there are 'Refinements' for 'Format' (Text [1]), 'LC Classification' (T - Technology [1]), and 'Language' (http://id.loc.gov/vocabulary/languages/eng [1]). The main results area shows 'Results 1 - 1 of 1' and a 'Sort by' dropdown set to 'Relevance'. A single result is listed: '1. Sikos, Leslie F., [Mastering structured data on the semantic web : from HTML5 microdata to linked open data](#)'. The text '(Work from Bib)' is highlighted in an orange box below the title. The author name 'Sikos, Leslie F.,' is listed below the title.

BIBFRAME 2.0 Database

LIBRARY OF CONGRESS | ASK A LIBRARIAN | DIGITAL COLLECTIONS | LIBRARY CATALOGS | Options | GO

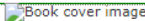
The Library of Congress > BIBFRAME Database > Search results > Record View

2016440906 | Everything | Search | > Search Tips

<< Back to results | Previous [1 of about 1] Next >> | View Labeled Display [] | ([doc]/lscoll/lcdb/works/c/0/1/9/4/0/4/8/1/9/c019404819.xml)

Sikos, Leslie F., Mastering structured data on the semantic web : from HTML5 microdata to linked open data

Work from Bib

Text <http://id.loc.gov/ontologies/bibframe/Text> 

Title Mastering structured data on the semantic web
Subtitle from HTML5 microdata to linked open data

PrimaryContribution <http://id.loc.gov/ontologies/bfbc/PrimaryContribution>

Person Sikos, Leslie F., <http://id.loc.gov/resources/works/19404819#Agent100-16>
Role author.

Language <http://id.loc.gov/vocabulary/languages/eng>

Content type <http://id.loc.gov/vocabulary/contentTypes/txt>
Source rdacontent

Topic Semantic Web.
Topic Linked data.
Topic Electronic data processing--Structured techniques.

Topic
MADS Auth label Electronic data processing

Topic
MADS Auth label Structured techniques

Topic Electronic data processing--Structured techniques.

Topic
MADS Auth label Electronic data processing

Topic
MADS Auth label Structured techniques

Topic Linked data.
Topic Semantic Web.

LCC Classification
Source [DLC](#)
Classification item number .S469 2015
Classification number TK5105.88815

Has Instance(s)

- > [Mastering structured data on the semantic web : from HTML5 microdata to linked open data / \(c0194048190001\)](#)

Other Views for This Description

- > [BIBFRAME RDF](#)
- > [BIBFRAME Turtle](#)
- > [BIBFRAME JSON](#)
- > [BIBFRAME JSON-LD](#)
- > [METS](#)

Bookmark This Description

- > <http://id.loc.gov/resources/works/c019404819>

Editor Link

- > <http://mlvlp04.loc.gov:8230/resources/works/c019404819.jsonld>

BIBFRAME 2.0 Database

[Martinů, Bohuslav, 1890-1959. Písně posvátné](#)

(Work from Authority)

Martinů, Bohuslav, 1890-1959.

[Bohuslav Martinů's time and space](#)



(Work Stub from Bib)



[Julietta. German](#)



(Work from Editor)



BIBFRAME 2.0 Database

BIBFRAME Work

Creator of Work (RDA 19.2) Primary Contribution
Martinů, Bohuslav, 1890-1959, Composer  

Title Information (RDA 6.14.2, RDA 6.14.3) Work Title Work Title Variation Transliterated Title
Julietta. German  

Form of Work Form/Genre
Operas  

Date of Work (RDA 6.4) Date of Work (RDA 6.4)
1937  

BIBFRAME 2.0 Database

The screenshot displays the 'Bibframe Editor Workspace' interface. At the top, there are navigation tabs: 'Browse', 'Editor' (which is active), 'Load Work', and 'Load IBC'. Below the tabs, the main area is titled 'Create Resource'. On the left side of this area, there is a vertical list of resource types with dropdown arrows: 'Monograph', 'Notated Music', 'Serial', and 'Cartographic'. To the right of this list is a control bar containing a back arrow, 'Cancel', 'Save', and 'Post' buttons. An orange arrow points to the 'Post' button. Below the control bar is a 'Preview' window showing the following RDF prefix definitions:

```
@prefix bf: <http://id.loc.gov/ontologies/bibframe/>.
@prefix bflc: <http://id.loc.gov/ontologies/bflc/>.
@prefix madsrdf: <http://www.loc.gov/mads/rdf/v1#>.
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>.
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>.
@prefix xsd: <http://www.w3.org/2001/XMLSchema#>.
```


BIBFRAME 2.0 Database

Bibframe Editor Workspace

Browse Editor Load Work Load IBC

Show 10 entries Search: julietta

id	name	title	LCCN	comment	modified	edit
2230	e56167457265337961474861321090111970404	Julietta. German	2018617310	jalb	2-12-2018 8:49a	Edit Delete

Showing 1 to 1 of 1 entries (filtered from 401 total entries)

Previous 1 Next

BIBFRAME 2.0 Database

The screenshot shows the BIBFRAME 2.0 database interface. At the top, there are navigation links: LIBRARY OF CONGRESS, ASK A LIBRARIAN, DIGITAL COLLECTIONS, and LIBRARY CATALOGS. The breadcrumb trail reads: The Library of Congress > BIBFRAME Database > Search results > Record View. The search input field contains 'julietta. german' and the dropdown menu is set to 'Everything'. Below the search bar, there are navigation links: << Back to results, Previous [3 of about 6], Next, and View Labeled Display. The main content area displays the record for 'Julietta. German' with a 'Work from Editor' label. The record details include:

- Work**: <http://id.loc.gov/ontologies/bibframe/Work> (with a 'Book cover image' icon)
- Title**: Julietta. German
- Date of work**: 1937
- Genre/form**: <http://id.loc.gov/authorities/genreForms/gf2014026976>
- Contribution** (repeated three times):
 - PersonalName**: <http://id.loc.gov/authorities/names/n2016158355>
 - Role**: <http://id.loc.gov/vocabulary/relators/sng>

 On the right side, there are additional options:

- Has Instance(s)**: [e20186173100001](#)
- Other Views for This Description**:
 - [BIBFRAME RDF](#)
 - [BIBFRAME Turtle](#)
 - [BIBFRAME JSON](#)
 - [BIBFRAME JSON-LD](#)
 - [METS](#)
- Bookmark This Description**: <http://id.loc.gov/resources/works/e2018617310>
- Editor Link**: <http://mlvp04.loc.gov:8230/resources/works/e2018617310.jsonld>

710	2	‡a Oper Frankfurt. ‡b Chor, ‡e singer.
710	2	‡a Frankfurter Museumsorchester, ‡e instrumentalist.
985		‡a BibframePilot2 ‡e 20180226

BIBFRAME 2.0 Database

BIBFRAME Database
Library of Congress Metadata

🔍 2016440906

Everything Title Author/Creator Subject

Filter on:

Everything Works Instances Items

Category:

Instance or Work Categories:

Everything From BF Editor
 No Merge activity RDA Cataloging Rules
 E-CIP Records Foreign IBC
 IBC Records Any 985 batch code

Work Categories:

Works that have Bibs merged on them NameTitle work
 Title Work Work from Title or NameTitle Authority
 Expression Stub Related Works

Instance categories:

Instances merged onto any Work Instances merged onto Authority Work
 Instances merged onto Bib Work

Explore

- See how a MARC record looks in BIBFRAME RDF
- <http://id.loc.gov/tools/bibframe/compare>

BIBFRAME Comparison Tool Compare MARCXML to BIBFRAME2

Identifier Bib ID LCCN Serialization Turtle RDF XML

 Lookup Name URIs No Yes

MARC

```

086 0 $a-
100 1 $aMiranda, Lin-Manuel,$d1980-$ecomposer,$elibrettist,$elyricist,$eperformer.
245 10 $aHamilton :$boriginal Broadway cast recording /$c[book, music and lyrics] by Lin-Manuel Miranda.
250 $a[Explicit version].
264 1 $aNew York, NY :$bAtlantic Recording Corporation,$c[2015]
264 4 $c@2015
300 $a2 audio discs (142 min.) :$bdigital, stereo ;$c4 3/4 in.
306 $a022200
336 $aperformed music$bprmm$2ndacontent
337 $aaudio$bbs$2rdamedia
338 $aaudio disc$bbsd$2rdacarrier
340 $b4 3/4 in.
344 $adigital$boptical$c1.4 mm/$gstereo$2rda
347 $aaudio file$bCD audio$2rda
500 $aComposed by Lin-Manuel Miranda.
500 $aInspired by the book Alexander Hamilton by Ron Chernow.
500 $aTitle from disc label.
500 $a2 booklets with lyrics and full credits (34, 30 unnumbered pages : illustrations ; 12 cm) in container.
505 00 $gDisc 1.$tAct I :$tAlexander Hamilton :$tAaron Burr, Jr. :$tThe story of Tonight :$tThe City

```

```

yler sisters --$tFarmer refuted
d --$tThe story of tonight (rep
$tThat would be enough --$tGuns
n) --$tWhat comes next? --$tDea

```

BIBFRAME (Turtle)

```

<http://bibframe.example.org/19537131#Instance> a bf:Instance ;
  rdfs:label "Hamilton : original Broadway cast recording /" ;
  bf:baseMaterial <http://id.loc.gov/vocabulary/mmaterial/pla> ;
  bf:carrier <http://id.loc.gov/vocabulary/carriers/sd> ;
  bf:classification [ a bf:Classification ;
    rdfs:label "-" ;
    bf:source [ a bf:Source ;
      rdfs:label "sudocs" ] ] ;
  bf:copyrightDate "2015"^^<http://id.loc.gov/datatypes/edtf>,
    "02015" ;
  bf:digitalCharacteristic [ a bf:EncodingFormat ;
    rdfs:label "CD audio" ;
    bf:source [ a bf:Source ;
      rdfs:label "rda" ] ] ;
  [ a bf:FileType ;
    rdfs:label "audio file" ;
    bf:source [ a bf:Source ;
      rdfs:label "rda" ] ] ;
  bf:dimensions "4 3/4 in.",
    "4 3/4 in. or 12 cm." ;
  bf:duration "022200" ;
  bf:editionStatement "[Explicit version]" ;
  bf:emulsion <http://id.loc.gov/vocabulary/mmaterial/mtl> ;

```

Explore

- BIBFRAME vocabulary
 - www.loc.gov/bibframe/docs/index.html
- MARC to BIBFRAME conversion specs (Bib and Authority-title)
 - www.loc.gov/bibframe/mtbf
- MARC to BIBFRAME conversion programs (Bib and Authority-title)
 - <https://github.com/lcnetdev/marc2bibframe2>
- MARC to BIBFRAME comparison viewer (Bib and Authority-title)
 - <http://id.loc.gov/tools/bibframe/compare>

Questions?

Thank you!