

bf:title [ a bf>Title ;  
bf:mainTitle "Working with BIBFRAME at  
the National Library of Sweden" ] .

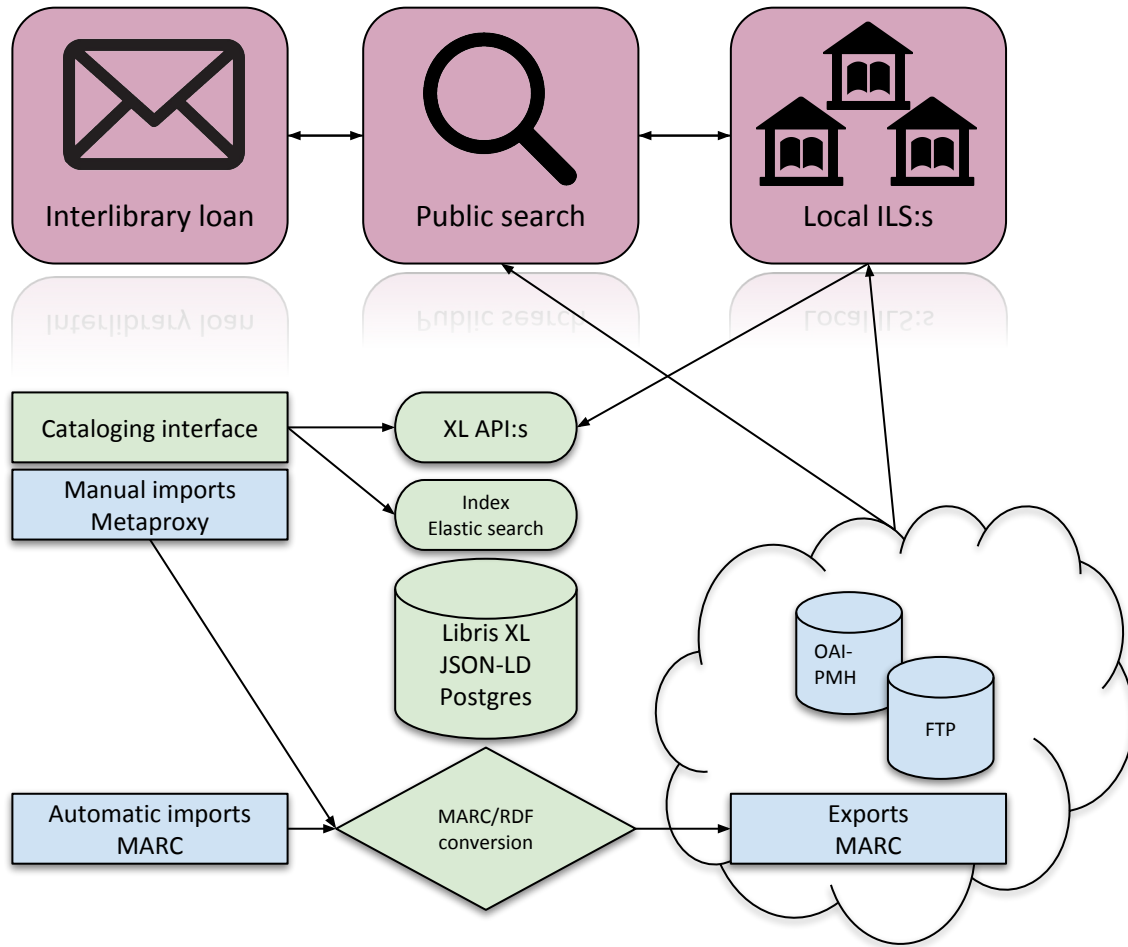
bf:responsibilityStatement "Fredrik Klingwall" .

# A rear view

The Libris XL system went live almost ten years after Libris was first published in a minimal form of linked data.

A project which started in 2012 and has been almost parallel to the BIBFRAME development.

A new data platform, a new format, and a new administrative interface.



# Mission: To replace MARC21...

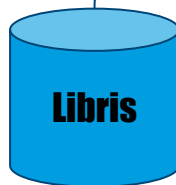
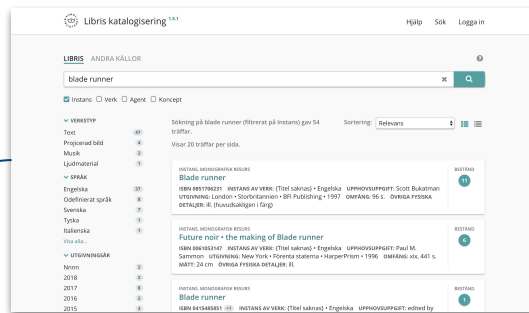
...when “everyone” is using MARC21.

*Must have requirements*

- ! Be able to produce MARC21 from our RDF model.
- ! Administrative tool to support manual workflows.

# The cataloging interface

- ❑ A web application to administrate bibliographic information, holdings and authorities.
- ❑ An unfiltered window into the Libris data.
- ❑ **Not** a tool for
  - ❑ discovery
  - ❑ circulation



# Data-driven application

- ❑ No opinions - No prettified data.
- ❑ Context is defined through external files as settings.
- ❑ It could easily be used to describe internets favorite thing...



▼ UTGIVNINGÅR

© 1953	1
© 1952	1
© 1951	2
© 1948	1
© 1947	1
© 1945	1
© 1937	1
© 2011	1
Z193	1
Yyy.	1
Xxxx	7
Xu	1
U📍	26
Uuu	1k
Uu	3

# Cats!



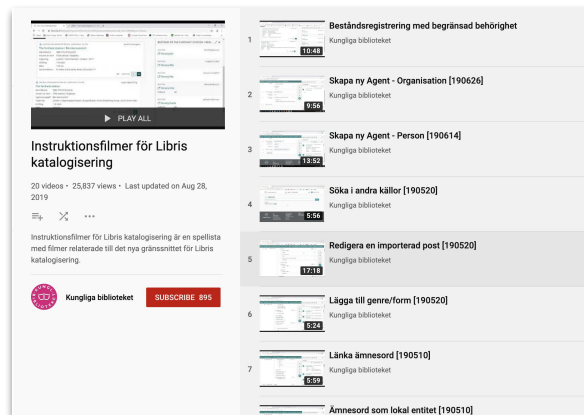
# Resources defining the workflow

- ❑ The **vocabulary** describing the possible entities and their inheritance structure.
- ❑ **Lens definitions**, describing the properties needed to quickly identify a thing.
- ❑ A general **template** layout
- ❑ Help texts



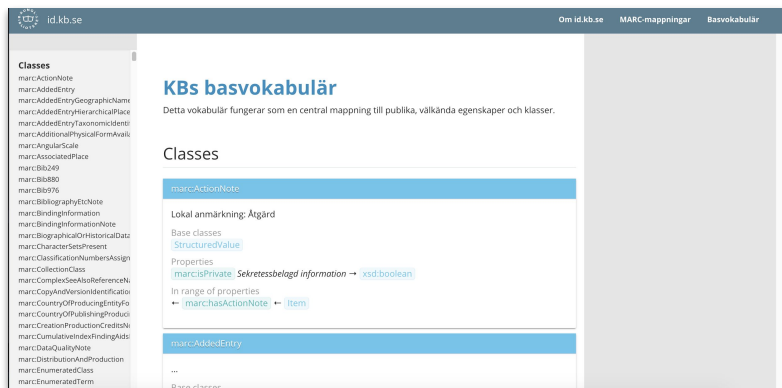
# Activities

- Terminology and definitions
  - Aligning Swedish translations of RDA and BF.
- Workflows
  - Templates for different materials
- Training
  - Video
  - Texts



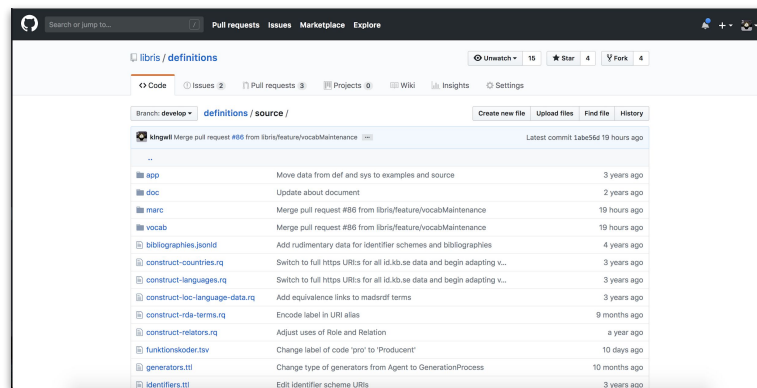
# Vocabulary & definitions

<https://id.kb.se/vocab/> - presentation



The screenshot shows the website <https://id.kb.se/vocab/>. The page title is "KBs basvokabulär". Below the title, it states: "Detta vokabulär fungerar som en central mappning till publika, välkända egenskaper och klasser." The page lists various classes under the heading "Classes", including `marcActionNote`, `marcAddressEntry`, `marcAdditionalEntryGeographicName`, `marcAdditionalEntryHierarchicalPlace`, `marcAdditionalEntryIsomericIdent`, `marcAdditionalPhysicalFormAvail`, `marcAngularScale`, `marcAssociatedPlace`, `marcBib249`, `marcBib880`, `marcBib976`, `marcBiographyFicNote`, `marcBindingInformation`, `marcBindingInformationNote`, `marcBiographicalHistoricalData`, `marcCharacterSetPresent`, `marcClassificationNumbersAssign`, `marcCollectionClass`, `marcComplexObjectReferenceCh`, `marcCopyAndVersionIdentificatio`, `marcCountryOfProducingEntityFo`, `marcCountryOfPublishingProduct`, `marcCreationProductionCreditNo`, `marcCumulativeIndexFindingAids`, `marcDataQualityNote`, `marcDistributiveAndProduction`, `marcEnumeratedClass`, and `marcEnumeratedTerm`. The page also features a "Lokal anmärkning: Åtgärd" section and a "Properties" section with a link to `marcPrivate` and a note: "Sekretessbelagd information → xsd:boolean".

<https://github.com/libris/definitions> - code



The screenshot shows the GitHub repository for `libris/definitions`. The repository is in the `develop` branch. The main content is a list of pull requests and commits. The most recent commit is by `hingsell`, titled "Merge pull request #86 from libris/feature/vocabMaintenance", committed 19 hours ago. Below this, there is a list of pull requests and their descriptions:

- `app`: Move data from def and sys to examples and source (3 years ago)
- `doc`: Update about document (2 years ago)
- `marc`: Merge pull request #86 from libris/feature/vocabMaintenance (19 hours ago)
- `vocab`: Merge pull request #86 from libris/feature/vocabMaintenance (19 hours ago)
- `bibliographies.jsonld`: Add rudimentary data for identifier schemes and bibliographies (4 years ago)
- `construct-countries.rq`: Switch to full https URIs for all id.kb.se data and begin adapting v... (3 years ago)
- `construct-languages.rq`: Switch to full https URIs for all id.kb.se data and begin adapting v... (3 years ago)
- `construct-loc-language-data.rq`: Add equivalence links to madsrdf terms (3 years ago)
- `construct-rda-terms.rq`: Encode label in URI alias (9 months ago)
- `construct-relators.rq`: Adjust uses of Role and Relation (a year ago)
- `tunkitenskoder.tsv`: Change label of code 'prf' to 'Producer' (10 days ago)
- `generators.ttl`: Change type of generators from Agent to GenerationProcess (10 months ago)
- `identifiers.ttl`: Edit Identifier scheme URIs (3 years ago)

# Lens definitions: Cards, Chips & Full

- ❑ The user has a need to identify things by a (rather small) subset of its properties.
- ❑ Every type has different identifying properties. (Describing a person vs describing a book)

ELEKTRONISK, MONOGRAFISK RESURS

## Borderlands 2 • TV-spel (Playstation 3)

IDENTIFIER 5026555407625 • EAN INSTANS AV VERK: {Titel saknas} • Engelska BÄRARTYP: Optisk skiva (CD-A, CD-R, CD-ROM)  
UTGIVNING: [London] • 2K • 2012 • cop. 2012 OMFÅNG: 1 Blu-ray Disc ÖVRIGA FYSISKA DETALJER: ljud, färg TILLSAMMANS MED:  
handledning 8 s. :

Borderlands 2 • TV-spel (Playstatio...

## INSTANCE ADMIN METADATA

INSTANCE OF

Text:

- CONTRIBUTOR AND ROLE
  - Primär medverkan:
    - ASSOCIATED AGENT
      - Jansson • Tove • 1914-2001
  - Medverkan: Pietilä Tuulikki 1917-2009
- LANGUAGE INFORMATION
  - Svenska
- GENRE/Form
  - Ej skönlitterärt verk • 0 • marc
- LITTERÄR GENRE, MARC
  - id.kb.se/marc/NotFictionNotFurtherSpecifi...
    - Ej skönlitterärt verk, 0
- Klassifikation:
  - CODE
    - Gcdz Jansson, Tove
  - INSCHEME
    - Konceptsystem: kssb
  - Klassifikation: Ibz Pietilä, Tuulikki • kssb
  - Klassifikation: Lz
- SUBJECT
  - Jansson • Tove • 1914-2001
  - Person: Pietilä • Tuulikki • 1917-2009
- MARC:HASBIB976
  - SAB-rubrik (976): {Namnlös}



## ADD ENTITY | ENTITY ⓘ



själv

Show Föreslagna typer



TYP AV GENRE FÖR TEXT TILL LJUDUPPTAGNI... id.kb.se/marc/Autobiography

Självbiografi, Självbiografisk text, a

ExactMatch http://id.loc.gov/vocabulary/marcgt/aut



OFFENTLIG RESURS, MARC-T... id.kb.se/marc/AutonomousOrSemiAutono...

Självständig del av en stat, a

ExactMatch http://id.loc.gov/vocabulary/marcgt/gov

FIRST &lt; 1 &gt; LAST



Skapa lokal titet:

# Templates

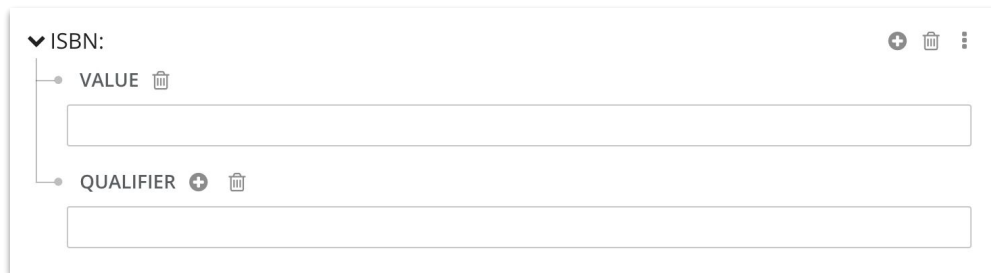
- ❑ **Defining properties for a workflow**
- ❑ Instance level with a local work
- ❑ Just Json-LD structures
- ❑ Based on RDA workflows
- ❑ Involving experts of the domain
- ❑ Can be used for
  - ❑ Creating new from scratch
  - ❑ As overlay to existing descriptions

```
{
  "instance": {
    "audiobook": {
    "movie": {
    "music-cd": {
    "printedCartograph": {
    "printedMonographText": {
      "label": "Bok",
      "description": "Tryckt monografi - RDA",
      "value": {
        "record": {
          "mainEntity": {
            "@id": "https://id.kb.se/TEMPID#it",
            "@type": "Instance",
            "issuanceType": "Monograph",
            "hasTitle": [{
              "@type": "Title",
              "mainTitle": "",
              "subtitle": ""
            }
          ]
        },
        "responsibilityStatement": "",
        "identifiedBy": {
```

# Snippets

## predefined forms - mini “templates” of entities

```
"ISBN": {  
  "@type": "ISBN",  
  "value": "",  
  "qualifier": [""]  
}
```



The screenshot shows a user interface for editing an ISBN entity. At the top, there is a dropdown menu labeled 'ISBN:' with a plus sign, a trash icon, and a vertical ellipsis icon. Below this, there are two main sections: 'VALUE' and 'QUALIFIER'. The 'VALUE' section has a single text input field. The 'QUALIFIER' section has a plus sign and a trash icon, followed by a text input field.

- ❑ Used for structured values and Local entities (non-linked)
- ❑ Gives control over dataforms, but for now can only be created once per entity



INSTANCE ADMIN METADATA

INSTANCE OF

Text:

CONTRIBUTOR AND ROLE

Primär medverkan:

ASSOCIATED AGENT

Jansson • Tove • 1914-2001

Medverkan: Pietilä Tuulikki 1917-2009

LANGUAGE INFORMATION

Svenska

GENRE/Form

Ej skönlitterärt verk • 0 • marc Självbiografi, Självbiografisk text

CLASSIFICATION

DDK-klassifikation: 839.7374 • full

Klassifikation:

CODE

Gcdz Jansson, Tove

INSCHEME

Konceptsystem: kssb

Klassifikation: Ibz Pietilä, Tuulikki • kssb

Klassifikation: Lz

SUBJECT

Jansson • Tove • 1914-2001

Person: Pietilä • Tuulikki • 1917-2009

MARC:HASBIB976

SAB-rubrik (976): {Namnlös}

SAB-rubrik (976): {Namnlös}



- Expand all (Alt+Plus)
- Collapse all (Alt+Minus)
- Make copy (⌘+⌘+C)
- Download compiled MARC21
- Download JSON-LD
- Preview MARC21 (Alt+P)
- Remove Instance

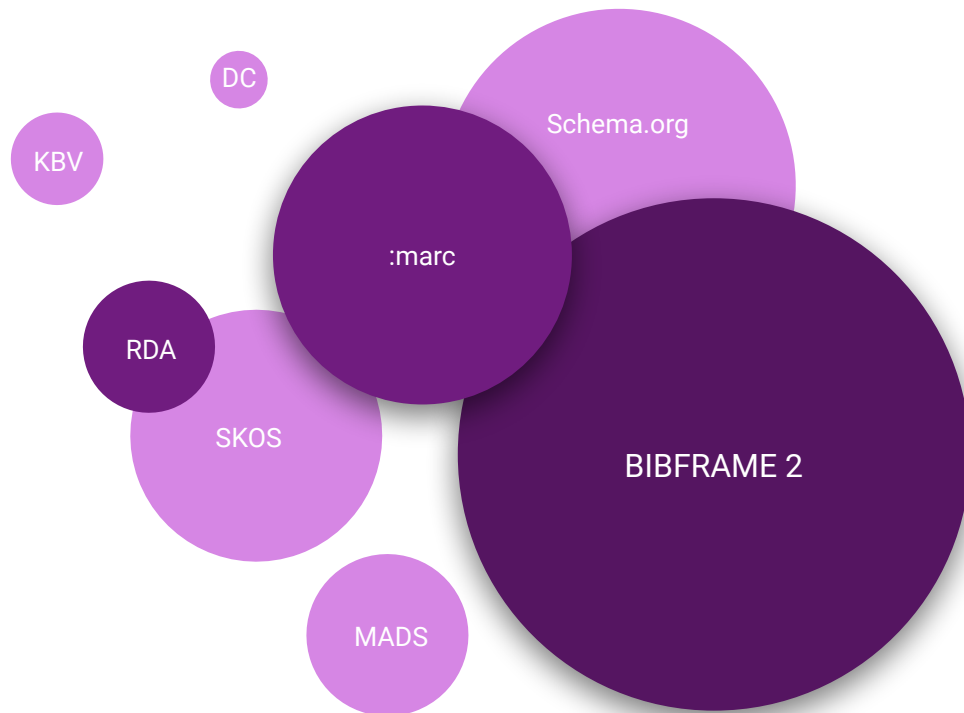
Tag	I1	I2	Subfield data
000			cam a a 4500
001			7149593
005			20140610120505.0
008			011211s1996 sw      000 0aswe
020			#a 9100563226 #q inb. #c 310:00
035			#9 9100563226
040			#a NB #e a
041			#a swe
042			#9 BULB
082	0	4	#a 839.7374 #2 23/swe
084			#a Lz
084			#a Gcdz Jansson, Tove #2 kssb/6
084			#a Ibz Pietilä, Tuulikki #2 kssb/6
100	1		#a Jansson, Tove, #d 1914-2001 #0 https://libris-dev.kb.se/wt79bh6f2j46dtr#it
245	1	0	#a Anteckningar från en ö / #c Tove Jansson, Tuulikki Pietilä.
264		1	#a Stockholm : #b Bonnier, #c 1996
264		3	#a Finland
300			#a 102, [1] s. #b ill. #c 25 cm

# When BF2 was not enough

## Missing in mappings

- ❑ Deviating local practices.
- ❑ Keeping granularity in conversion to MARC21.
- ❑ Information we want vs. information we are responsible for.





# Added details we have found useful

- ❑ **:PrimaryPublication** (Minimizing doubling information for bib 008).
- ❑ **:SeriesMembership** (Qualified form of inSeries).
- ❑ Distinguish different uses of e.g. ISBN. **:indirectlyIdentifiedBy** and **:incorrectlyIdentifiedBy**.
- ❑ ObjectProperties of **:hasDimensions**, **:hasDuration** etc.

# “Plan B”

```
    "249": {  
      "NOTE:Local": "LIBRIS-definierat fält, OBSOLET",  
      "addLink": "marc:hasBib249",  
      "resourceType": "marc:Bib249",  
      "i1": {"property": "marc:sequenceOfWork", "marcDefault": " "},  
      "i2": {"property": "marc:nonfilingChars", "marcDefault": "0"},  
      "$a": {"property": "marc:originalTitle"},  
      "$b": {"property": "marc:titleRemainder"},  
      "$n": {"addProperty": "marc:titleNumber"},  
      "$p": {"addProperty": "marc:titlePart"}  
    },
```

# How did it go?

- ❑ Activities on each library. Including preparing for worst case scenarios.
- ❑ Scripted cleanups. An investigation in what data we want and what the systems need.
- ❑ Tweaking of the conversion. Because Local Systems are set up differently.
- ❑ 1 backup rollback.
- ❑ Data-driven has made certain things harder to quick fix.
- ❑ Make source data great.

# Continuous releases (currently at 1.11.1)



**2018-06**

Release notes



**2018-07**

Release notes



**Pre-release information**

Preliminary



**Pre-release information**

Preliminary

# Feedback

- ❑ There are still hurdles to overcome in the workflows.
- ❑ More ergonomic interface, reduce number of clicks.
- ❑ Improve overall efficiency.
- ❑ Planning for worst case scenarios helped preparing.

# Areas of improvement

- ❑ More linkable things! Especially works.
- ❑ Provenance.
- ❑ Date and time... serials.
- ❑ Data validation feedback to users.
- ❑ Better caching and matching for enrichment.
- ❑ Cleaning up messy data!

# In conclusion

In total it has required people from almost all parts of the organization, developers, metadata experts, domain experts, catalogers, UX-designers, IT-operations, communication and support.

And most certainly including staff at all the Libris libraries who patiently have been testing, reporting bugs, attending workshops, helped us and each other out in this paradigm shift.

It has not been easy but I think a lot of us are look toward the future possibilities, especially for discovery.



# Thank you

Questions?

[fredrik.klingwall@kb.se](mailto:fredrik.klingwall@kb.se)