

# Tale of Two Editors: Sinopia



LD4P3 | Linked Data for Production: Closing the Loop

# Introduction

The screenshot displays the SINOPIA v3.6.2 Linked Data Editor interface. The top navigation bar includes 'Dashboard', 'Resource Templates', 'Search', 'Load RDF', 'Editor', and 'Exports'. The user is logged in as 'michelle'. The main content area shows the 'Title Information' section for a monograph instance. The instance title is 'Interlibrary loan' with a language of 'English'. The subtitle is 'theory and management' with a language of 'English'. The interface includes a sidebar with a tree view of the instance's properties and a main editing area with input fields and buttons for editing and adding parts.

LINKED DATA EDITOR

SINOPIA v3.6.2 michelle Help and Resources

Logout

Dashboard Resource Templates Search Load RDF Editor Exports

+ MARC Close Save

\_Monograph Instance (BIBFRAME)

URI for this resource: <https://api.sinopia.io/resource/53d1c02c-81ca-4774-8d9a-31883342802d> Copy URI

Title Information

Instance Title + Add another

Main Title

Main Title Interlibrary loan × Edit Language: English

Subtitle

Subtitle theory and management × Edit Language: English

+ Add Part number

+ Add Part name

- Linked data editor and supporting backend API and data storage
- Developed by LD4P (Linked Data for Production) funded by Andrew W. Mellon Foundation
- help.sinopia.io
- stage.sinopia.io

## History

- Initially a fork of the original Library of Congress BIBFRAME Editor
- Major Refactoring began in 2018
- Initial Sinopia Stack
  - Included a separate forked copy of the Profile Editor
  - Linked Data Platform Trellis for storing RDF
  - Deployed on Amazon Web Services
  - Integration with Question Authority
- Subsequent work cycles
  - Migrated from Trellis to MongoDB
  - Refactored templates to RDF, removed Profile Editor
  - Copied UI elements from current LOC editor
  - User dashboard for accessing recently used search queries, templates, and resources

## Community-Focused & Collaborative Editing

- From Sinopia's inception, design and implementation supports multiple groups
- Groups can be institutions (i.e Stanford University, Cornell University, Library of Congress) or organizations (PCC, MLA)
- Existing Sinopia implementation allows universal editing by any authenticated user BUT
- Current work-cycle is adding permissions to restrict editing by users in specific groups, still universal read access

## General RDF Editor and Datastore

- Users can use any ontology in their resource templates
- However, Sinopia is optimized for BIBFRAME
  - Search
  - Rdf2marc
  - UI enhancements
- Examples of other ontologies
  - Schema.org
  - Performed Music Ontology
  - RDA FRBR
- Users can also Sinopia API for non-BIBFRAME record management, backend datastore agnostic to what RDF is stored, however RDF resources do have BIBFRAME-specific metadata

## Agile Software Development

- Sinopia team organization and workflows based on Agile software development Best practices:
  - Work in Short 1-2 week sprints that together make up a work-cycle, typically 6-8 weeks in length
  - Unit and integration tests for functionality and bug fixes
  - Continuous integration, tests are run and must pass to merged into main code branches
  - Get immediate feedback from users for UI and functionality changes
- Iterative process, flexible to changing requirements, resource availability, and developer experience
- Stakeholders and users drive requirements
- “Kanban”-like project boards track tasks through identification, assignment, development, and deployment

## Third-Party Integrations

- Focus of latest LD4P grant, “Closing the Loop”
- Sinopia PCC resources will be sent to
  - Casallini’s ShareVDE
  - OCLC Entity back-bone
- Current work-cycle building extract-transform-load workflows
  - **Extract** Sinopia resources
  - **Transform** RDF to MARC21 and JSON records
  - **Load** records into ILS and Library Services Platforms

## Thank-you! Questions?

### Sinopia Environments:

- Development at <https://development.sinopia.io/>
- Stage at <https://stage.sinopia.io/>
- Production at <https://sinopia.io/>

### Code Repositories:

- Sinopia Editor at [https://github.com/ld4p/sinopia\\_editor](https://github.com/ld4p/sinopia_editor)
- Sinopia API at [https://github.com/ld4p/sinopia\\_api](https://github.com/ld4p/sinopia_api)
- Other supporting projects at <https://github.com/ld4p>

# **LC Bibframe Editor**

**BIBFRAME Workshop in Europe 2021**

**Matt Miller**

**Network Development and MARC Standards Office**

**Library of Congress**

# Starting Point

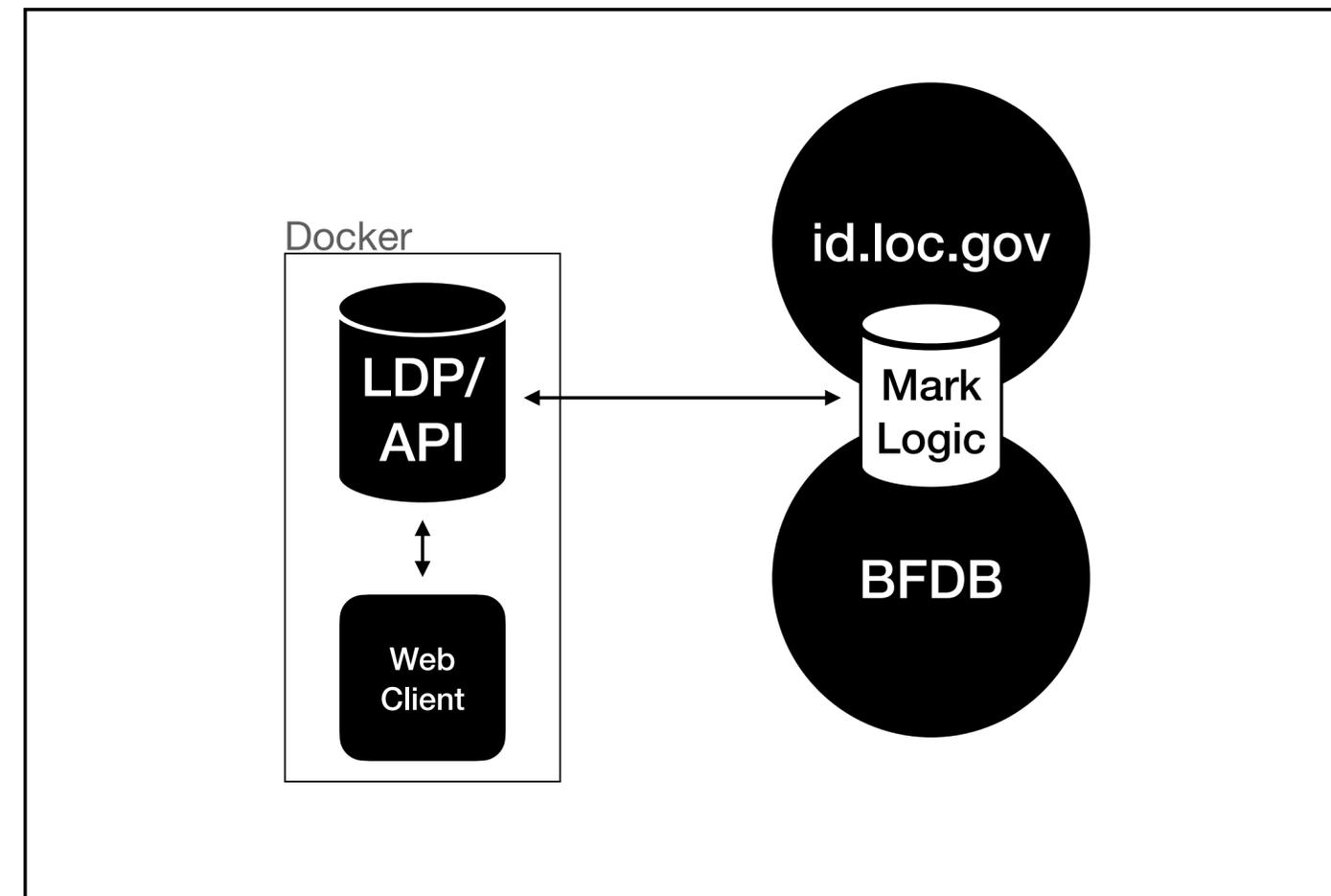
- An editor to advance BF100
- Designed by the catalogers
- Bibframe opinionated
- Make use of recent web development practices: reactive, stateful, etc.

# Timeline

- Late 2019 - Early 2020: Contracted SAMHÆNG to work with pilot catalogers to design new editor
- Mid 2020 - Development began
- Mid 2021 - Soft launch
- Rest of 2021 - Stabilization, bug fixes, feature development

# Technical Considerations

- Powered by profiles (uses the old profile editor)
- Communicates in RDF/XML - compliments LC's ecosystem
- Client heavy, builds XML payloads client side
- Reactive, uses Vue.js
- Simple Dockerized stack:
  - MongoDB powered LDP backend
  - Node Express backend API
  - Nginx routes and servers client



- ✓ Subject of the Work
  - ✓ Classification numbers
  - ✓ Classification numbers
  - ✓ Classification numbers
  - ✓ Content Type
  - ✓ Language
  - ✓ Illustrative Content
  - Color Content
  - ✓ Supplementary Content
  - ✓ Supplementary Content
  - ✓ Supplementary Content
  - Related Works or Expressions
  - Add BIBFRAME Instance
  - ✓ Admin Metadata
  - ✓
  - <http://www.w3.org/2000/01/rdf-schema#label>
- ◆
- Instance-1**

## Work

<http://id.loc.gov/resources/works/c017943071>

### Lookup

Lookup

### Creator of Work

**Person**

Search LCNAF

Identifier

Source of identifier

Search MARC relator term

### Title Information

**Work Title**

Preferred Title for Work

**Texas depression-era desperadoes**

Part number

## Work

Lookup  
<http://id.loc.gov/resources/works/c017943071>

Creator of Work  
**Haile, Bartee, 1945-  
1001 \$aHaile, Bartee,\$d1945-**

Title Information  
**Texas depression-era desperadoes**

Form of Work  
**biographies**

(Geographic) Coverage of the Content  
<http://id.loc.gov/vocabulary/geographicAreas/us-tx>

Contents  
**West Dallas: Where the Wild Weeds Grew -- "From a Schoolboy to a Rattlesnake" -- Off and Running: Birth of the Barrow Gang -- "Don't Get in That Car with Clyde" -- The Teenage Tagalong -- The Raid on Eastham -- The End of the Road -- Big Send-off in Big D -- Rubbing Salt in the Wound -- The Brothers Hamilton -- "Machine Gun" Kelly Misfires in Texas -- Bandit Brothers in the Big Thicket -- Fun and Games in Galveston.**

Summary  
**"Discover the wild and fascinating story of crime in Texas in the 1930s"-- Provided by**

# Devil is in the details, rubber meets the road, <insert idiom here>

- When your horizon is production you will unlock new layers of requirements.
- In the new editor's case that includes
  - Design / Usability requests
  - Features that support existing workflows
  - Hidden requirements
- In our case we are building in an environment of having the same cataloging system for the last 20 years.
- Need to support converting BF records back to MARC

# Our development cycle

- Message board with all participants, they interact and ask questions give suggestions, feature requests, etc.
- Monthly all participants meetings: announcements, updates, demos, etc.
- Monthly division BF meetings
- Weekly Office Hours meeting
- These generate issues and feature requests, we have a list where people "vote" on what they want prioritized
- New versioned release every couple weeks

# Examples: Supporting Workflows

Subject of the Work debug

Subject components

Search LCSH/LCNAF

Texas--History--1846-1950 |  | edit | x

Thesaurus Heading is valid

Library of Congress subject headings | x

Subject of the Work debug

Subject components

Search LCSH/LCNAF

TRUE CRIME / General. |  | edit | x

Thesaurus Heading not checked

bisacsh (uncontrolled) | x

Subject of the Work debug

Subject components

Search LCSH/LCNAF

Crime--Texas--History--20th century. |  | edit | x

Thesaurus Partial heading validation

Library of Congress subject headings | x

- Copy cataloging workflow.
- Needed to quickly validate a subject heading to determine if its needs review
- Checkout Kevin Ford's talk on this from LD4: [https://  
sched.co/joAW](https://sched.co/joAW)

# Examples: More(?!) complicated interface

The screenshot shows a search interface for LCSH/LCNAF. The main search results list includes:

- 20th century (Copenhagen, Denmark) [LCNAF]
- 20th century (Cybele Records) [LCNAF]
- 20th century (Television program : 1994- ... [LCNAF]
- 20th century American music [LCNAF]
- 20th century [Literal]
- 20th Century Limited (Express train)
- 20th century (USE Twentieth century)

The selected result, "20th century", is highlighted in green. Below the list, the heading "Crime--Texas--History--20th century" is displayed in a green box. At the bottom, there are filters for "Topic / Heading (\$a \$x)", "Genre (\$v)", "Geographic (\$z)", and "Chronological (\$y)", along with an "Add [SHIFT+Enter]" button.

The detailed view for "20th century" shows:

- Temporal
- [view on id.loc.gov](#)
- MADS Collection:
  - Subdivisions
  - TemporalSubdivisions
  - LCSH\_General
  - PatternHeadingH1148
  - PatternHeadingH1154
  - PatternHeadingH1155.2
  - PatternHeadingH1156
  - PatternHeadingH1160

- More textual based subject editing interface
- Designed for catalogers who know what headings they want to use and just want to type them quickly
- Needs to support all possible pre-coordinated heading construction
- Can be turned off. Make UI features toggleable

# Examples: Hidden/Soft Requirements

## Diacritic Packs

You can only have one enabled at a time:

Voyager Macro Express Shortcuts  
▶ Show shortcut keys:

Voyager Diacritic Entry Mode Shortcuts  
▼ Show shortcut keys:   
With this mode you press Control+e to put the input into diacritic mode, then press one of the short cuts listed below.

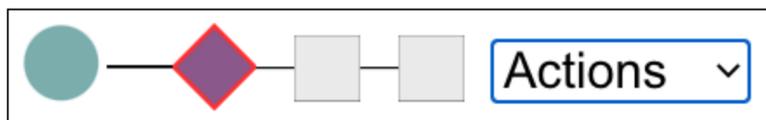
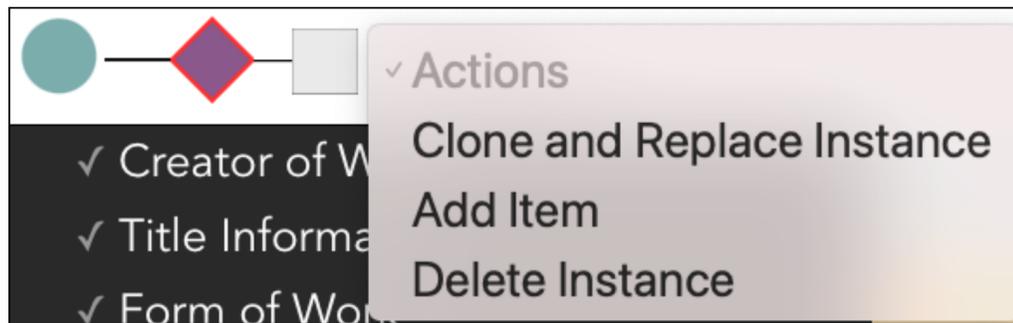
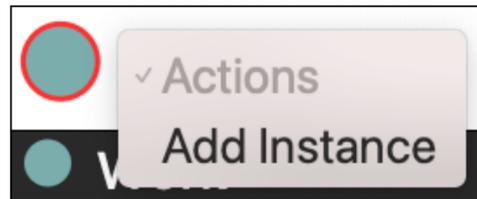
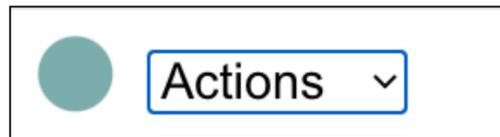
For example, to add an acute to a letter you would

- Enter the letter, for example "a"
- Press Control+e
- Press they key "b"

|                    |   |
|--------------------|---|
| Ctrl+e   b         | Acute Acute / Combining Acute Accent (Oxia)                   |
| Ctrl+e   Shift + b | Superscript 2   |
| Ctrl+e   5         | ae Digraph ae Digraph (Lowercase) / Latin Small Ligature ae   |
| Ctrl+e   Shift + 5 | AE Digraph AE Digraph (Uppercase) / Latin Capital Ligature AE |
| Ctrl+e   .         | Alif Alif / Modifier Letter Right Half Ring                   |
| Ctrl+e   0         | Ayn Ayn / Modifier Letter Turned Comma                        |
| Ctrl+e   Shift + 0 | Musical flat Music Flat Sign                                  |
| Ctrl+e   f         | Breve Breve / Combining Breve (Vrachy)                        |
| Ctrl+e   Shift + f | Superscript 6   |
| Ctrl+e   9         | British pound British Pound / Pound Sign                      |
| Ctrl+e   Shift + 9 | Dot at midline Middle Dot                                     |

- Non-latin input is very important. An ecosystem of solutions/workarounds had developed for our ILS to input diacritics
- Something the new editor had to support, 20 years of muscle memory is a high hurdle
- Toggleable shortcut “packs” that replicate existing diacritic shortcuts used in the ILS

# Examples: Reducing New Complexity



- Cataloging now involves keeping track of Works vs Instances vs Items. Feedback that it was hard to do in the editor interface.
- A little mini-map of the layout of the resource to help communicate what is going on in the record/resource.

# Next Steps

- Continued development cycles
- Once stabilized, development of more ambitious feature requests
- Starting to get feedback that is more “It would make things easier if the editor did...” Making the editor a way to make cataloging easier/quicker.

Thanks for listening!

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