16 September 2025

WebJunction

Linked data for public libraries: An introduction

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What is linked data?

Structured data,
published on the web,
connected across sites,
services, organizations,
and industries

What is linked data?

Entity

Any object or concept that can be identified, named, or addressed

Linked data terms

OCLC

URI

(Uniform Resource Identifier)

Identifies a resource
on the internet

Linked data terms

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This:

38°1′15″N 120°24′41″W

Not this:

Springfield

Identifiers, not text strings

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This:

https://id.oclc.org/worldcat/entity/E39PBJtgYDdKdvTYGb4Xy4WxDq

Not this:

Vincent VanGogh

Identifiers, not text strings

Ontology

The formal representation of concepts and the relationships between those concepts

Linked data terms

OCLC

Knowledge graph

A network of linked data connections that describe contextually related resources

Linked data terms

Fields in MARC records

100	1		Shakespeare, William, $d 1564-1616
245	1	0	Hamlet / $c William Shakespeare
264		1	London: $b Penguin Books, $c 1994.

Library data today

OCLC

Entities connected by relationships

Person:
William Shakespeare

is the author of

Work:
Hamlet

published by

Organization (publisher)
Penguin Books

located in

Place:
London

Library linked data

OCLC

Book preview
46/423 pages available

Preview

About

3.7/5	4.6/5	4.9/5
ThriftBooks	Target	Walmart

85% liked this book
Google users

Lessons in Chemistry is a novel by Bonnie Garmus. Published by Doubleday in April 2022, it is Garmus's debut novel. It tells the story of Elizabeth Zott, who becomes a beloved cooking show host in 1960s Southern California after being fired as a chemist four years earlier. Wikipedia

Originally published: March 29, 2022

Author: Bonnie Garmus

Genres: Historical Fiction, Humor, Tragicomedy, Humorous Fiction

Audio read by: Miranda Raison

ISBN: 9780385547345

Set in: 1960s Southern California

Feedback

OCLC

Fiction

Audio read by: Miranda Raison

ISBN: 9780385547345

Set in: 1960s Southern California

Feedback

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Author

Bonnie Garmus
American author and former copywriter

Bonnie Jean Garmus is an American author and former copywriter. Garmus is from Seattle. She received her bachelor's degree in creative writing/aesthetic studies from UC Santa Cruz. She's worked as a copywriter and creativ...

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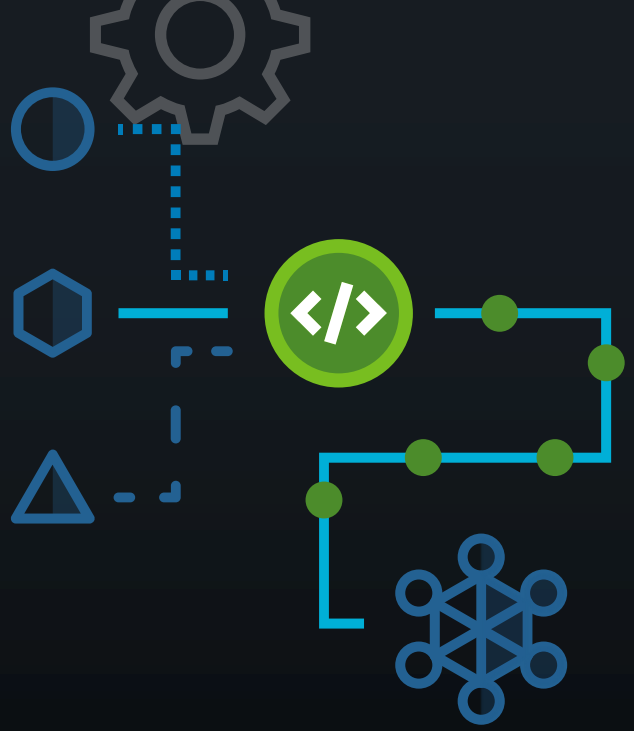
Why linked data?

Connect and scale library knowledge

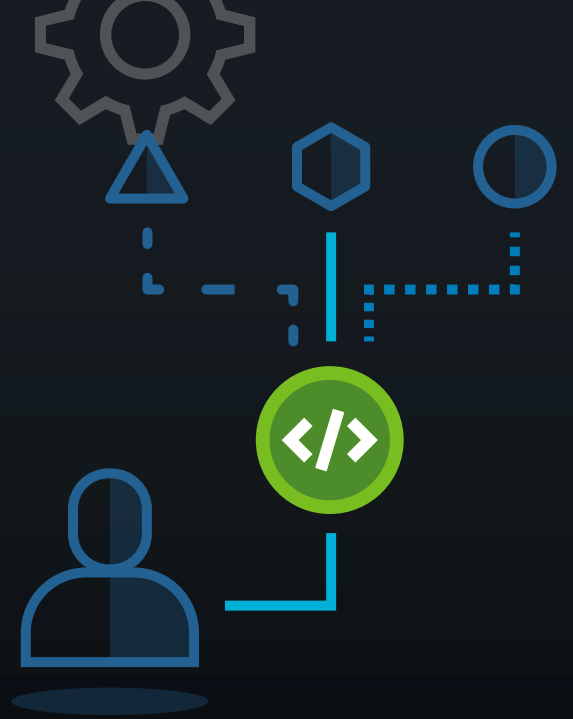
Benefits of linked data for libraries

Fuel serendipitous discovery



Benefits of linked data for libraries

Focus on high-value knowledge work



Benefits of linked data for libraries

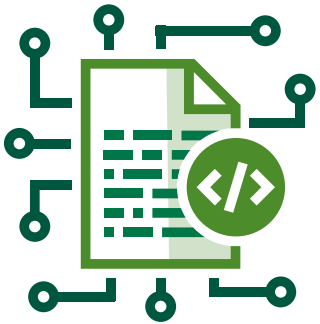
Contribute to the global information ecosystem

Benefits of linked data for libraries

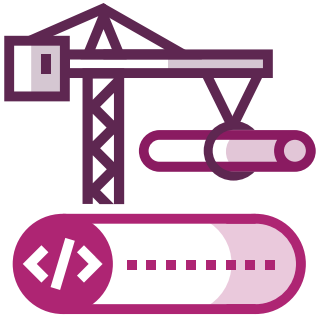
What this means for library work.

Our linked data strategy

Expertise



Data



Infrastructure

Tools

Data

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WorldCat® Entities

- **Works**
- **Places**
- **Persons**
- **Organizations**
- **Events**

entities.oclc.org

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WorldCat Entities URIs as JSON-ID

Dewey Decimal Classification

Unlocks the power of Dewey numbers via the creation of URIs

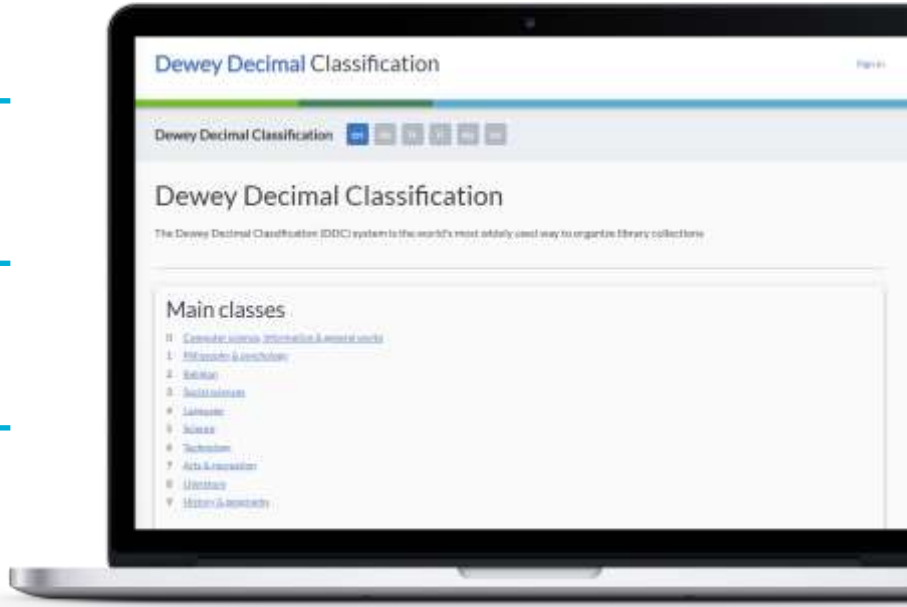
Forms the foundation for Concept entities

Provides subject classifications to Works entities in WorldCat Entities

Creates a layer of new relationships for knowledge graphs

Connects Dewey classifications to FAST topical headings

oc.lc/dewey-linked-data



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Dewey Decimal Classification

Sign in

Dewey Decimal Classification en de fr it no sv

DDC / 6: Technology / 62: Engineering / 627: Hydraulic engineering

oc.lc/dewey-linked-data

627: Hydraulic engineering

Download

URI: https://id.oclc.org/worldcat/ddc/E3tPjwQmcxRdR8jHvRd4fcFy3g

Entity type: Concept

Scope

The branch of engineering dealing with utilization and control of natural waters of the earth

Class here hydraulic structures, water resource engineering

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BIBFRAME

- Bibliographic linked data
- Uses URIs (Uniform Resource Identifiers) to identify resources
- Enables connections between:
  - Bibliographic information
  - Authority data
  - Other external resources and vocabularies
- Example:
  - `<Work URI> bf:creator <Person URI>`

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Part of a growing ecosystem

schema.org

isni

WIKIDATA

bf: BIBFRAME

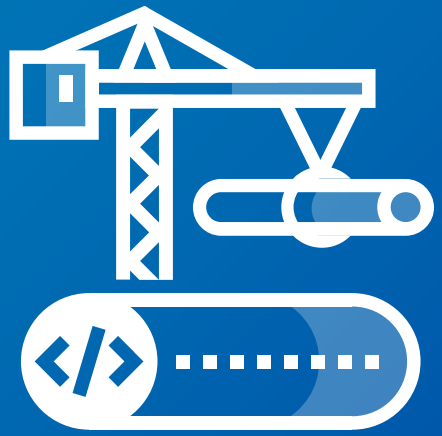
VIAF The Virtual International Authority File

ORCID

FAST Linked Data
FAST Authority File

WorldCat® Entities

Dewey Decimal Classification



Infrastructure

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WorldCat Entities in WorldCat

400M

WorldCat Entity URIs

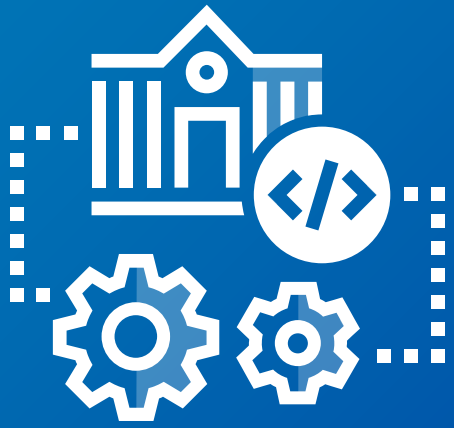
Dewey linked data into WorldCat

Uses of Dewey URIs:

- Unlock relationships between classifications in discovery systems
- Multilingual and human readable labels for Dewey numbers
- Bridge classifications and topical subject headings for enhanced information discovery

143 million WorldCat records

As of mid-June, OCLC has added over 50 million Dewey Linked Data URIs



Tools

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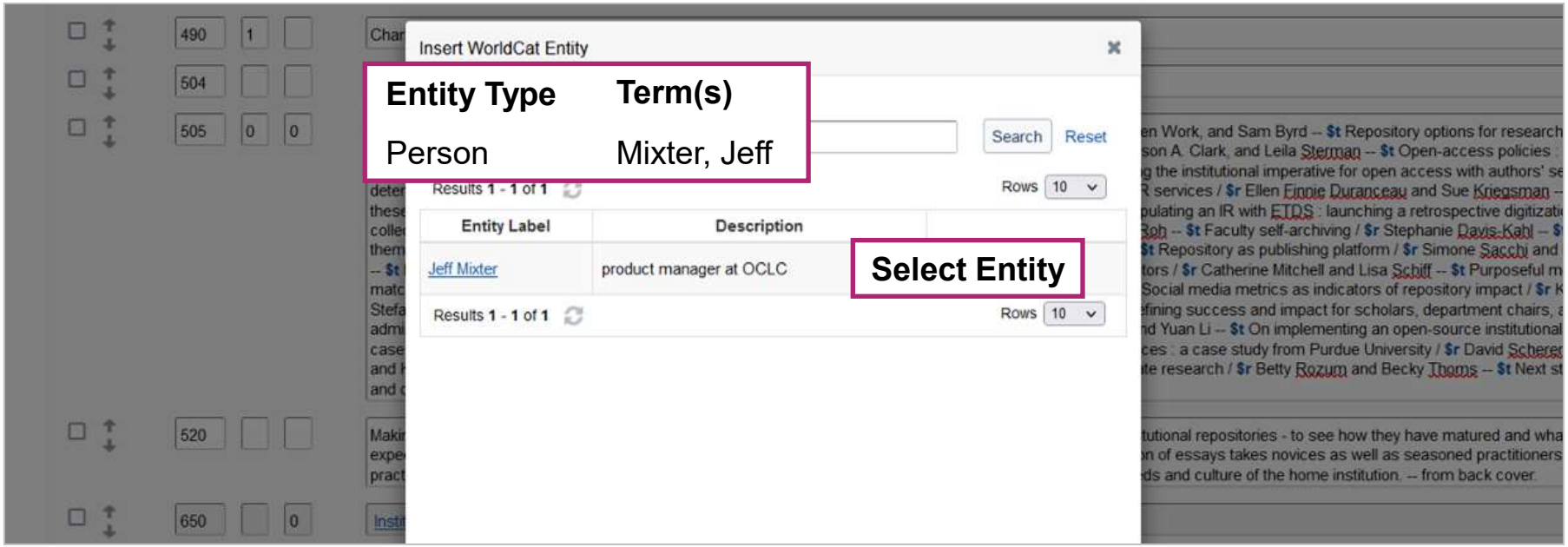
Look up WorldCat Entities within Record Manager and Connexion



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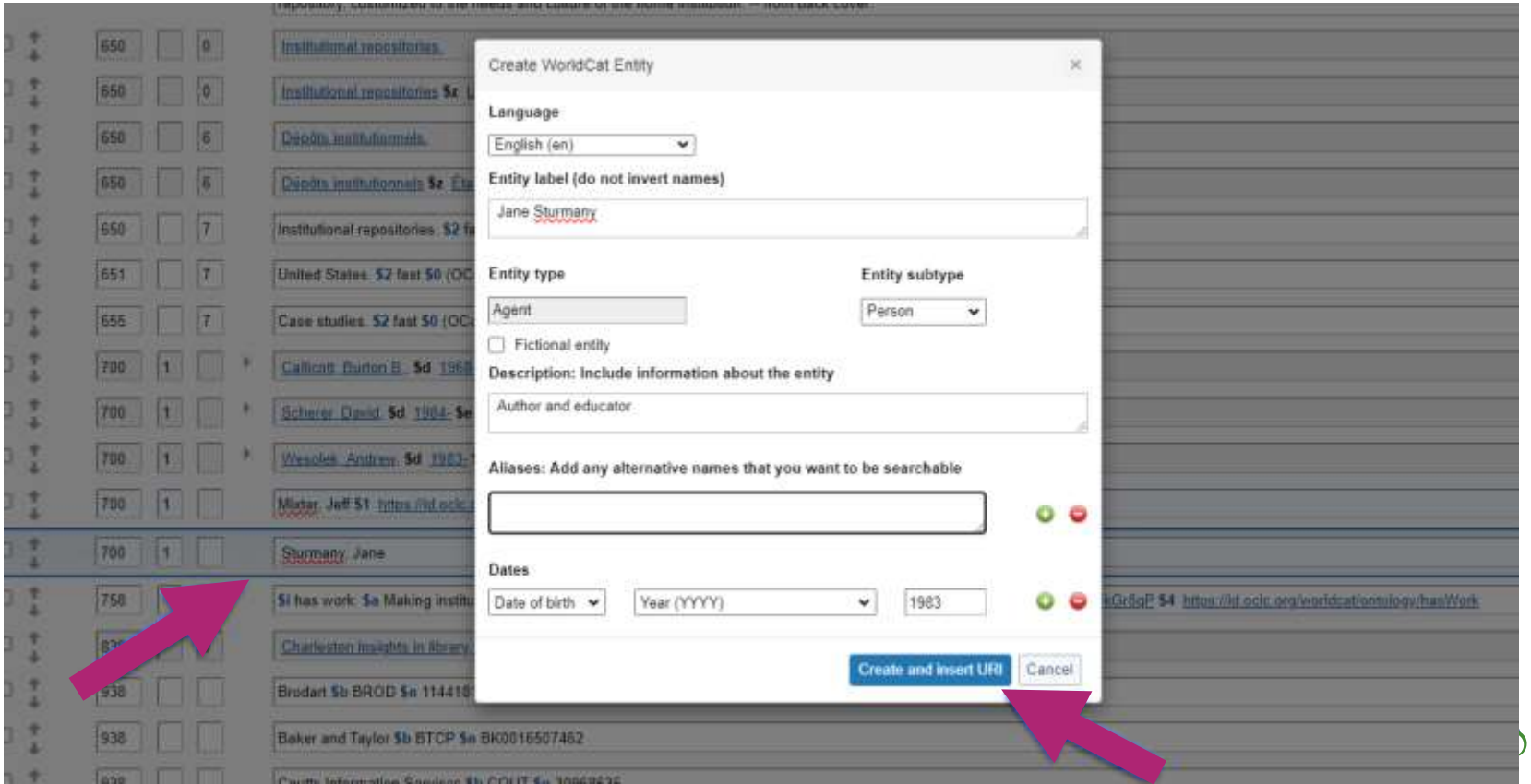
Create WorldCat Entity



Library workers need new tools to be able to work with linked data

A tool to create and curate linked data entities (People, Works, Places, etc.)

Able to connect those entities to existing library data

Leverages the value in MARC catalogs today

Uses standardized rules that promote discovery and connection of library resources more widely

OCLC Meridian

Create, curate, and connect linked data in WorldCat Entities

oc.lc/meridian

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Make use of Dewey linked data APIs

Dewey Linked Data

Included with a WebDewey subscription, limited data access for non WebDewey subscribers

Dewey Lookup API

Available to WebDewey subscribers only

oc.lc/dewey-services-apis

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BIBFRAME Editor

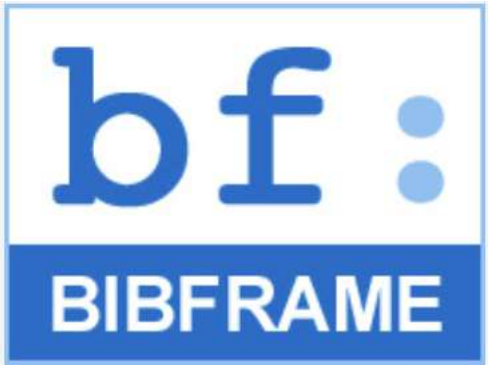
Seamless work in MARC or BIBFRAME

Web Application and set of APIs

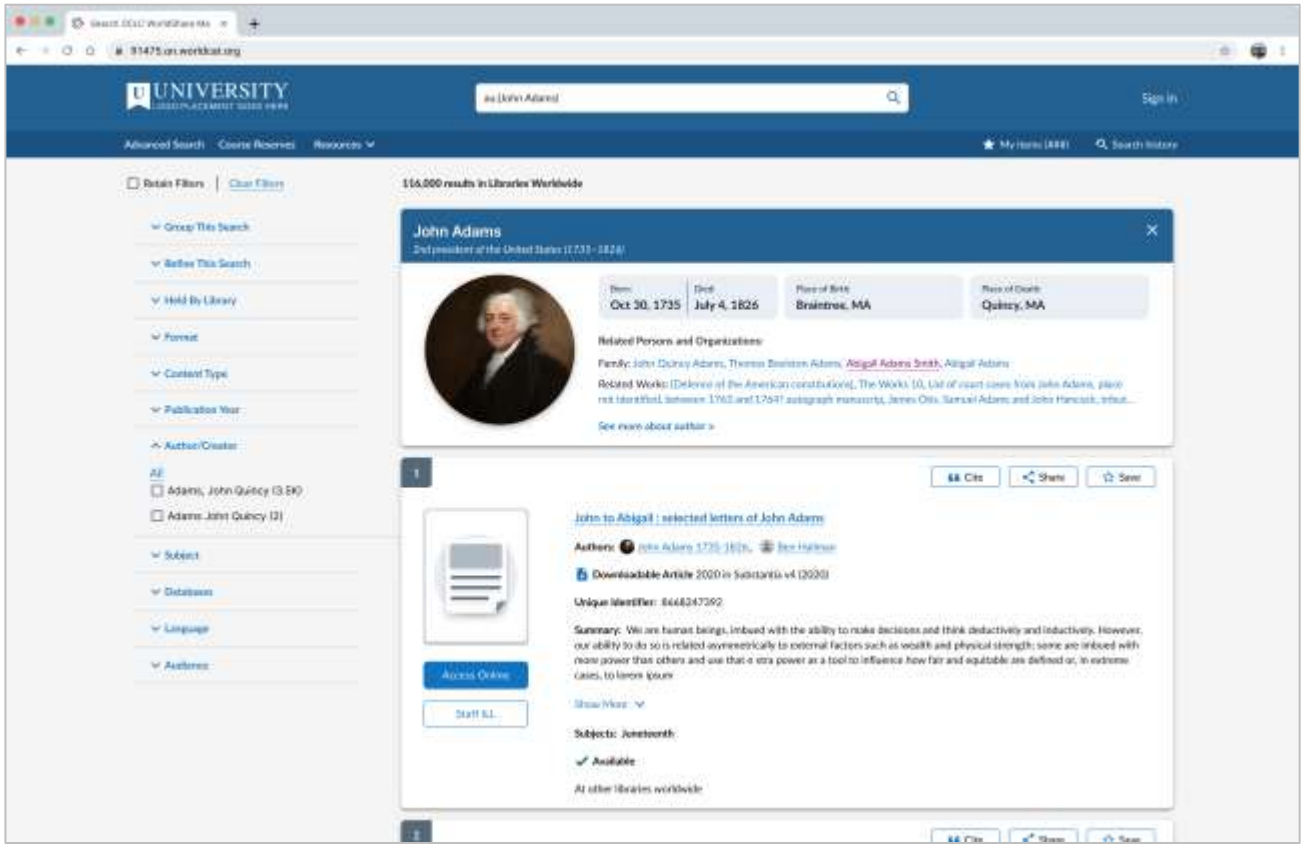
Development partner testing soon

Integration with OCLC Meridian

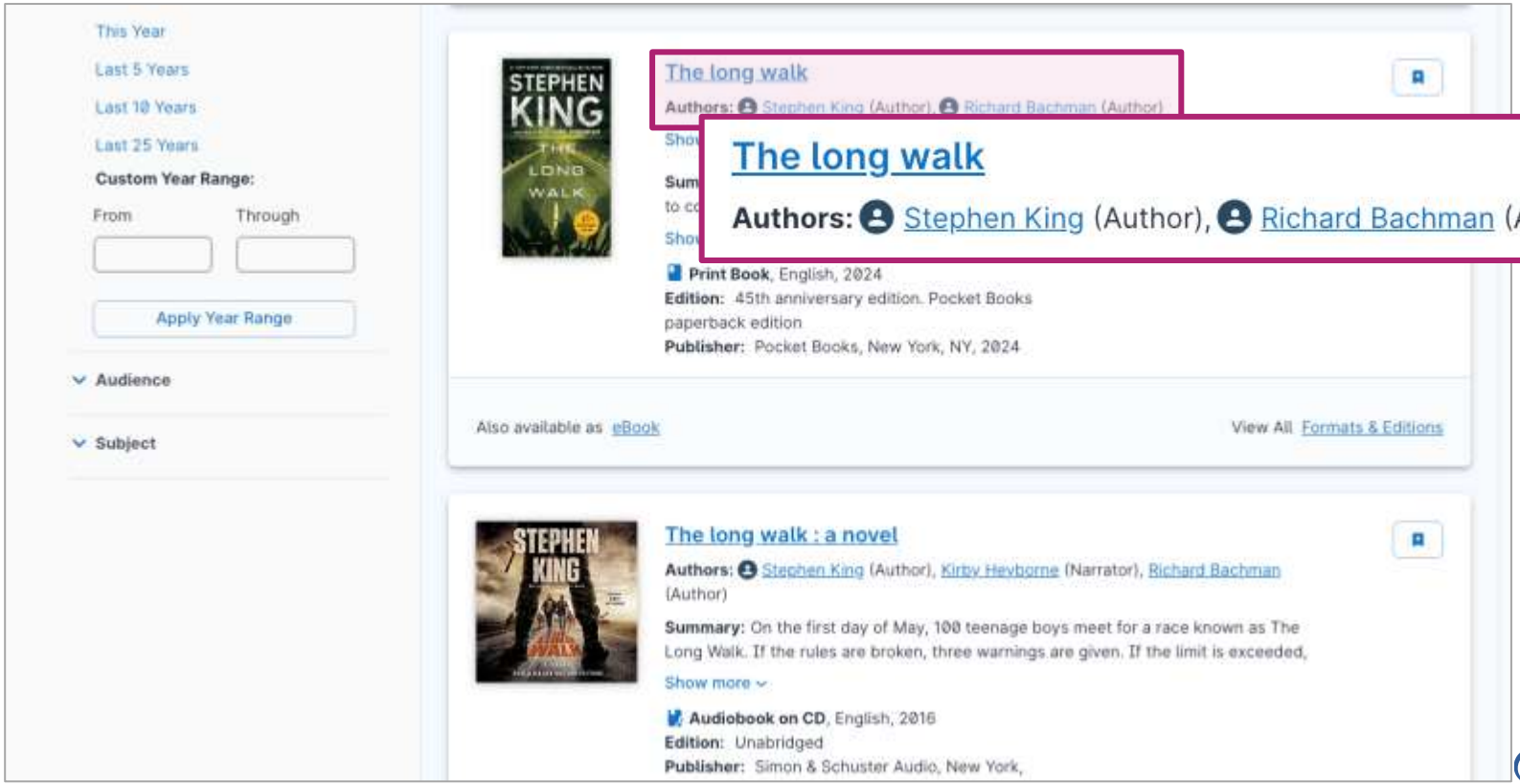
BIBFRAME support for all of WorldCat



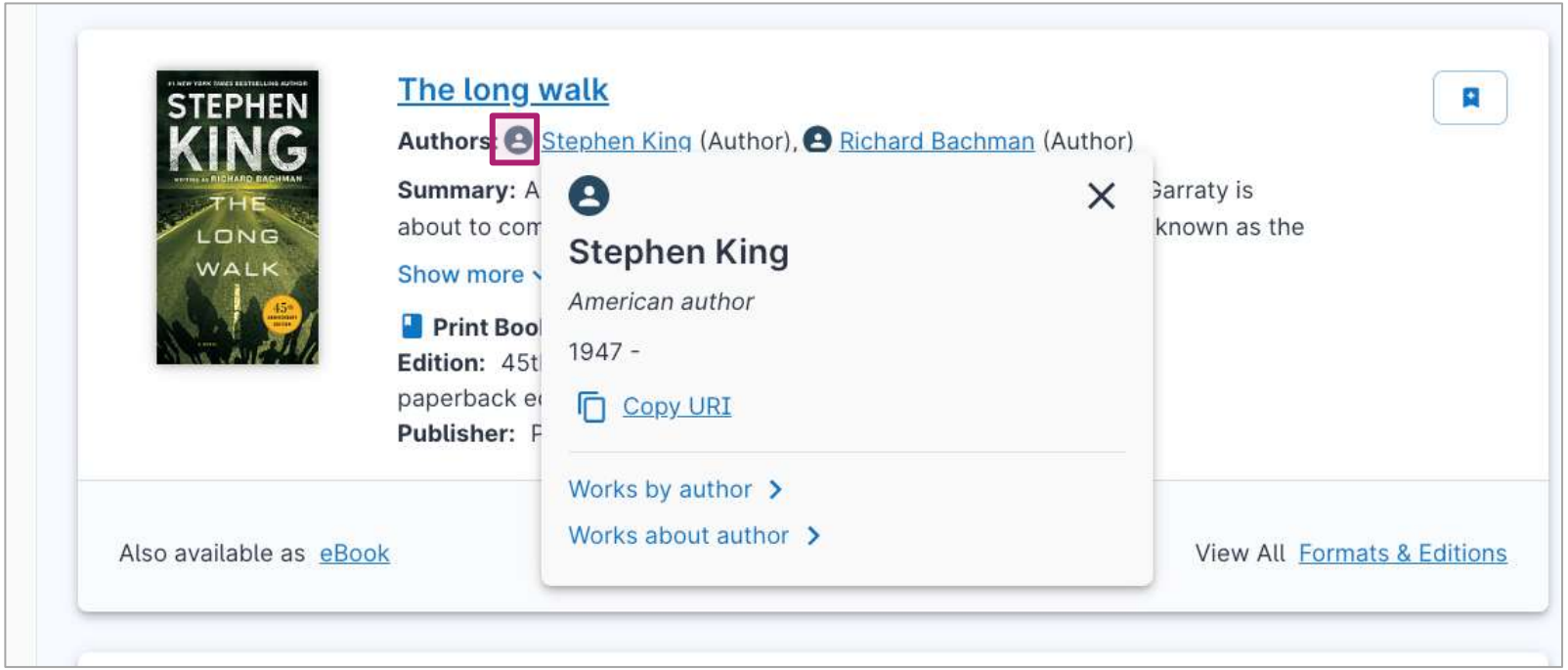
Fueling discovery experiences



Linked data in WorldCat.org

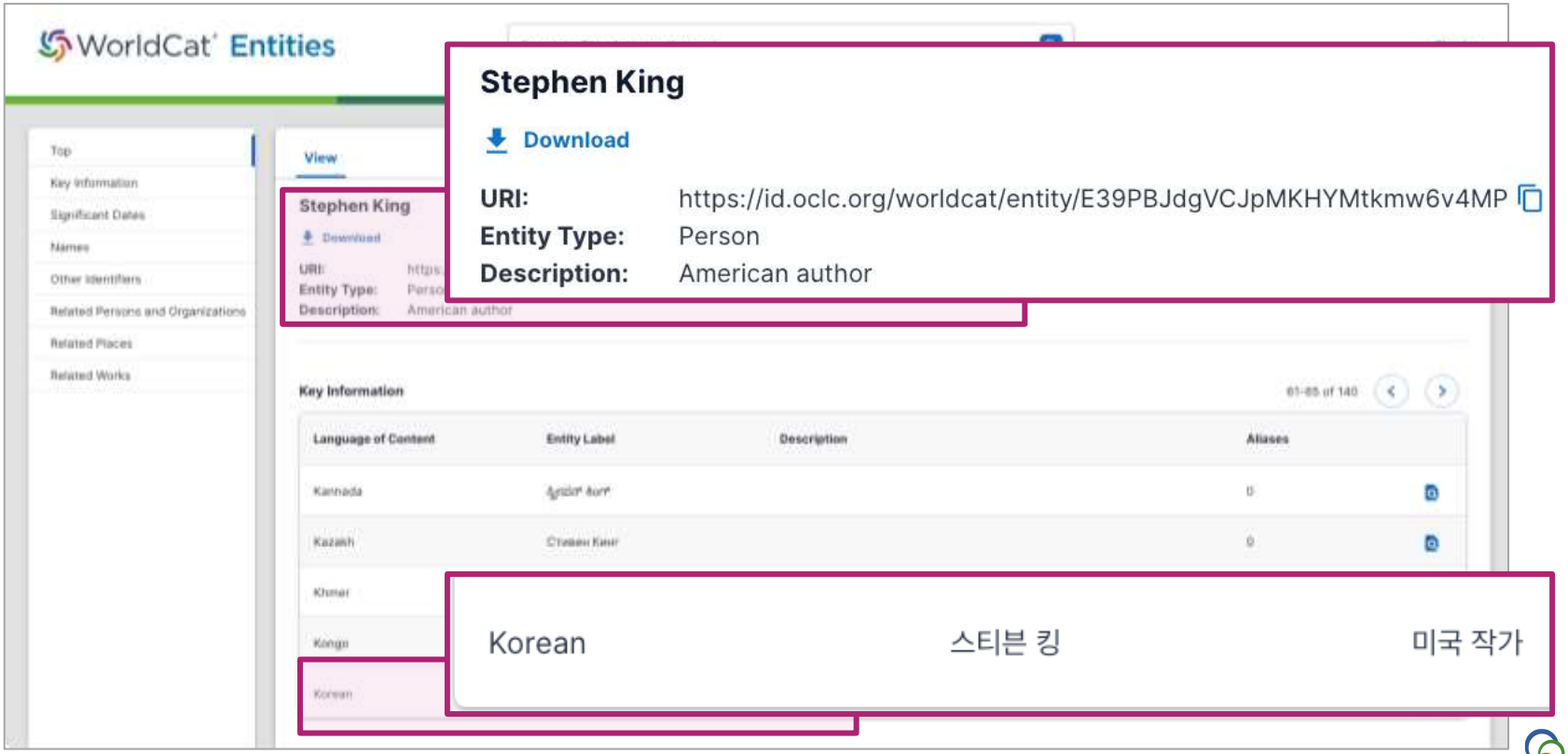


Data from WorldCat Entities



Language display

WorldCat Entities Data



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Because what is known must be shared.®

oc.lc/linkeddata

oc.lc/linked-data-future

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