4.5.24 OCAC

### Linked data

#### The next evolution of library metadata



### Agenda

- What is linked data and why is it important for libraries?
- OCLC's linked data strategy
- Linked data in products and services



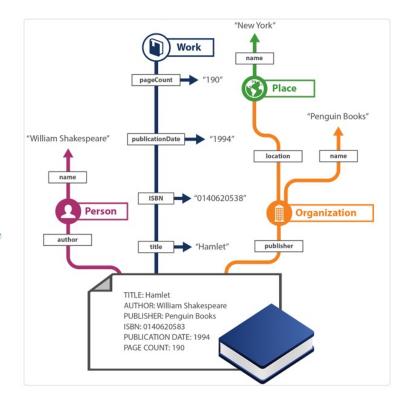




### Library linked data

100 1	Shakes peare, William, \$d 1584-1818,	
245 1 0	Hamlet/\$ <u>; William</u> Shakes peare.	
250	[1sted.	
264 1	London : St. <u>Renguin</u> Bocks , \$c 1994.	
300	190 pages : <u>\$b ilustrations</u> : \$c 19 cm.	
336	text \$b bit \$2 rdacontent	
337	unmediated \$b j) \$2 rdamedia	_
338	volume \$b nc \$2 rda carrier	
490 0	Penguin popular clas sics	
650 0	Tragedy	
650 0	Princes, \$z. Denmark \$v. Drama.	
650 7	Princes . \$2 fast \$0 (QC,gL,Q)fst01076481	
650 7	Tragedy. \$2 fast \$0 (QCoLC)/6 t0 1154355	
651 7	Denmark. \$2 fas t \$0 (QCqLC)/st01204558	
655 7	Drama. \$2 fast \$0 (QCoLC) & D1423879	
655 7	Tragedies. \$2 gsafd	

MARC record screenshot extracted from OCLC WorldCat



#### Figure 1.1: A bibliographic description as a record and a graph.

Figure from: Carol Jean Godby, Shenghui Wang, and Jeffrey K Mixter, Library Linked Data in the Cloud: OCLC's Experiments with New Models of Resource Description (San Rafael: Morgan & Claypool, 2015)



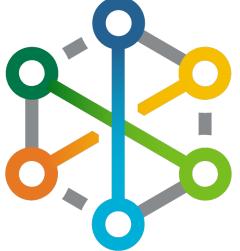
# Expand influence and reach with linked data

**Connect and scale library knowledge** 

**Fuel serendipitous discovery** 

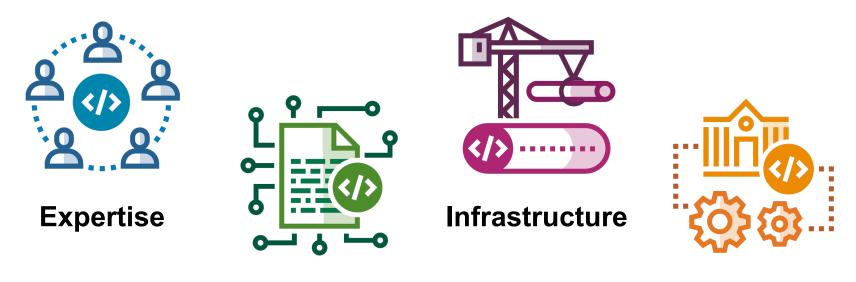
Focus on high-value knowledge work

Contribute to the global information ecosystem





#### **Delivering on our linked data strategy**



Data

Tools



## Linked Data in products and services



#### **Evolution of data sets**

SworldCat<sup>®</sup> Entities



**Organizations** 

**FAST Linked Data** 

#### Dewey<sup>®</sup> Services





#### **WorldCat Entities**

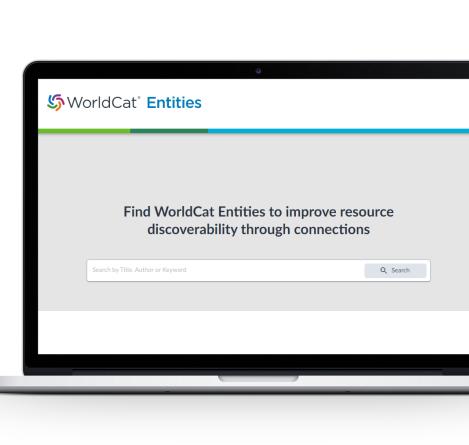
More than 150M entities

**Explore relationships** 

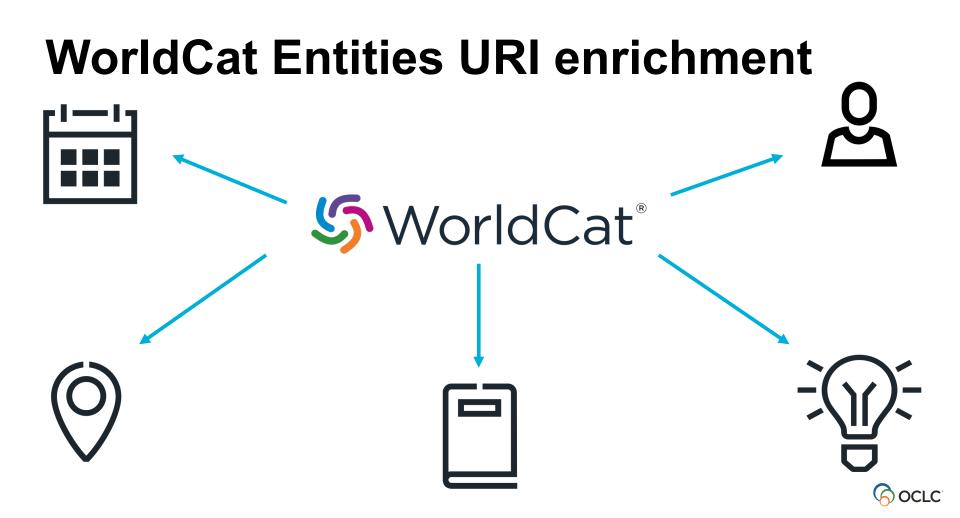
**Find connections** 

**Empower discovery** 

entities.oclc.org







#### **WorldCat Entities in MARC records**

↑ ↓	650	Institutional repositories \$z United States \$v Case studies.
↑ ↓	650 7	Institutional repositories. <b>\$2</b> fast <b>\$0</b> ( <u>QCoLC</u> )fst01740486
↑ +	700 1	Mixter, Jeff \$1 https://id.oclc.org/worldcat/entity/E39PBJtRJykHh8gwxXj3JQ4cyd
↑ ↓	700 1	McMillian, Ciara.



#### **WorldShare Record Manager**

Insert linked identifiers within existing cataloging workflows

WorldCat Entities URIs can be added to fields:

- Person entity 100, 600, or 700
- Event entity 647
- Place entity 651
- Work entity 758

#### Entities appear in the \$1 of the field



-	*			
		490 1	Char Insert WorldCat Entity	×
		504	Entity Type         Term(s)           St Cr         Person         Mixter, Jeff	t en Work, and Sam Byrd \$t Repository options for research data / \$ son A. Clark, and Leila <u>Sterman</u> \$t Open-access policies : basics a
			impa deter Results 1 - 1 of 1 💭 Rows 10 🗸	g the institutional imperative for open access with authors' self- R services / \$r Ellen Finnie Duranceau and Sue Kriegsman \$t Elect
			coller Entity Label Description	pulating an IR with ETDS : launching a retrospective digitization projection <u>Roh</u> <b>\$t</b> Faculty self-archiving / <b>\$r</b> Stephanie <u>Davis Kahl</u> <b>\$t</b> Incentive
			them \$t i Jeff Mixter product manager at OCLC Select Entity	St Repository as publishing platform / \$r Simone Sacchi and Mark Ne tors / \$r Catherine Mitchell and Lisa Schiff \$t Purposeful metrics : Social media metrics as indicators of repository impact / \$r Kim Holm
			Stefa adm Results 1 - 1 of 1 2 Rows 10 -	fining success and impact for scholars, department chairs, and nd Yuan Li \$t On implementing an open-source institutional reposito
			case and H and c	ces : a case study from Purdue University / \$r David <u>Scherer</u> , Lisa <u>Zi</u> te research / \$r Betty <u>Rozum</u> and Becky <u>Thoms</u> \$t Next steps for <u>I</u>
	□ ‡	520	Makir exper pract	tutional repositories - to see how they have matured and what can be on of essays takes novices as well as seasoned practitioners through ids and culture of the home institution from back cover.
	□ ‡	650 0	Instit	
		650 0	Instr	
		650 7	Institu	cel
		700	Mixter, Jeff	
		938	Baker and Taylor \$b BTCP \$n BK0016507462	



### **WorldCat Entities in MARC records**

#### Included in MARC records through:

- Export in WorldShare Record Manager
- Export in Connexion
- WorldCat Metadata API
- Z39.50 Cataloging
- Bulk output in WorldShare Collection Manager





Create and curate linked data in WorldCat Entities



#### Create a new Organization entity

Create Entity	×
Language of Content	
English (en)	~
Entity Label	
The Ohio State University	
Entity Type	
Organization 🗸	
Description Include information about the organization	
A public land-grant research university in Columbus, Ohio.	
	58/500
Aliases Add any alternative names that you want to be searchable.	
osy	] ⊕ ⊝
Create	Cancel



# Immediately access a linked data URI

	Create Entity		×	
	Language of Content			
	English (en)		~	
	Entity Label			
	The Ohio State Univ	versity		
View Edit				
Entity Type: Organizatio	nqDQXwXHPc6vjBPHJ7	, Columbus, Ohio.		
Key Information Add				
Language of Content	Entity Label	Description	Aliases	
English	The Ohio State University	A public land-grant research university in Columbus, Ohio.	1	Θ
		Create	Cancel	



**Connect the new** entity to other entities in the WorldCat graph

	Create Entity X
	Language of Content
	English (en)
	Entity Label
	Add Related Place
'iew Edit	
tions 🗸	Relationship
he Ohio State Univ	Headquarters 🗸
tity ID: E39QjHt tity Type: Organiza escription: A public	Entity Label
	Columbus E39PBJghmBfH76JbHTqycKXfMP
y Information Add	
y Information Add Language of Content	seat of a first-order administrative division in Franklin County, Ohio, United States, North America



#### Find other connection points in the WorldCat graph

View	Edit					
Actions 🗸						
Jeff Mixte	r					
Copy URI						
Entity ID: Entity Type: Description:	Person	ykHh8gwxXj3JQ4cyd anager at OCLC				
Key Informat	ion Add			1-5	of 28 <	$\triangleright$
Language of	Content	Entity Label	Description	Aliase	s	
English		Jeff Mixter	product manager at OCLC	2	ľ	Θ
German		Jeff Mixter		0	ľ	Θ



# Connect them back to the new entity

elationship		
Educated At		~
ntity Label		
nerty Eaber		
the ohio state		Q
	University	Q
the ohio state The Ohio State	<b>University</b> QXwXHPc6vjBPHJ7	Q



Rich and meaningfully connected graph of data to serve library workflows

		Related Persons and	Organizations	Add			
View	<	The Ohio State University	1 O	Bruce Washburn	1 O		
Actions	Re	Educated at					
Jeff Mix							
Entity ID:							
Entity Typ Descripti							
Entity Ty Descripti	Er	Related Places A	ıdd				
Entity Tyr Descripti Key Inforr	Er	Cleveland	dd ∕∕ ⊖			]	) (
Entity Ty Descripti	Er					]	
Entity Ty; Descripti Key Inforr Languag	Er	Cleveland				)	) (



# **BIBFRAME** support



#### **BIBFRAME** ingest/export





#### **BIBFRAME** editor

# Will meet the needs of librarians as they transition to non-MARC formats

Supports new data needs and workflows

Will work seamlessly back-and-forth with BIBFRAME and MARC data

Libraries can choose what works for them



### Because what is known must be shared.®

#### Let's continue the conversation: oc.lc/linkeddata

Anne Washington Product Analyst, Metadata & Digital Services washinga@oclc.org Jeff Mixter Senior Product Manager, Metadata & Digital Services Mixterj@oclc.org

