Share Family Workshop

ALA Annual 2024, San Diego, July 1, 8.30am – 10am Pacific US time
Marriott Marquis, Grand Ballroom Section 02
this slide deck https://bit.ly/SVDE_Workshop2023_slides
recording available at https://www.youtube.com/live/8xBeGB3Npls

https://share-family.org
https://wiki.svde.org/
https://svde.org
info@svde.org

Welcome

The Share Family Linked Data Ecosystem

The Share Family is a global community built on collaboration that brings together libraries, archives, museums, consortia and Library Service Platforms (LSPs) to join their knowledge in an ever-widening network of interconnected bibliographic data.

For further details please refer to
https://www.share-family.org
and
the dedicated Share-VDE wiki section.

Referenecs

Brochure website https://share-family.org

New YouTube channel https://www.youtube.com/@Share_Family

new communication campaign: first video launched, more to come
https://www.youtube.com/watch?v=uHVJTjyBM-w

Deepenings and specific resources on the SVDE Wiki
https://wiki.share-vde.org/wiki/ShareFamily:NewsAndUpdates

Today's agenda

JCricket Linked Data Editor demonstration, Tiziana Possemato, Casalini Libri and @Cult - Share Family

FOLIO and Lehigh University pilot, Boaz Nadav Manes, Lehigh University and Sebastian Hammer, Index Data

SVDE Ontology - Update July 2024, Nancy Lorimer, Stanford University

The SHARE Catalogue: Unimarc-Bibframe Mapping - An evolving path, Claudio Forziati, Federico II University in Naples, SHARE Catalogue

Real-Time "RDFization" - How to provide instant Semantic Graphs without any RDF storage, Andrea Gazzarini, Spaziocodice - Share Family

Q&A

FOLIO and Lehigh University pilot

Boaz Nadav Manes, Lehigh University and Sebastian Hammer, Index Data

folio

ReShare

The future of library resource sharing

CCLP

Lehigh and Open Source

"Being on the precipice of the so far unknown becoming known that is really neat", Lisa McColl (Head of Lehigh's Metadata Services and a member of Share)

Linked Data explorations with ID and @Cult

Reali

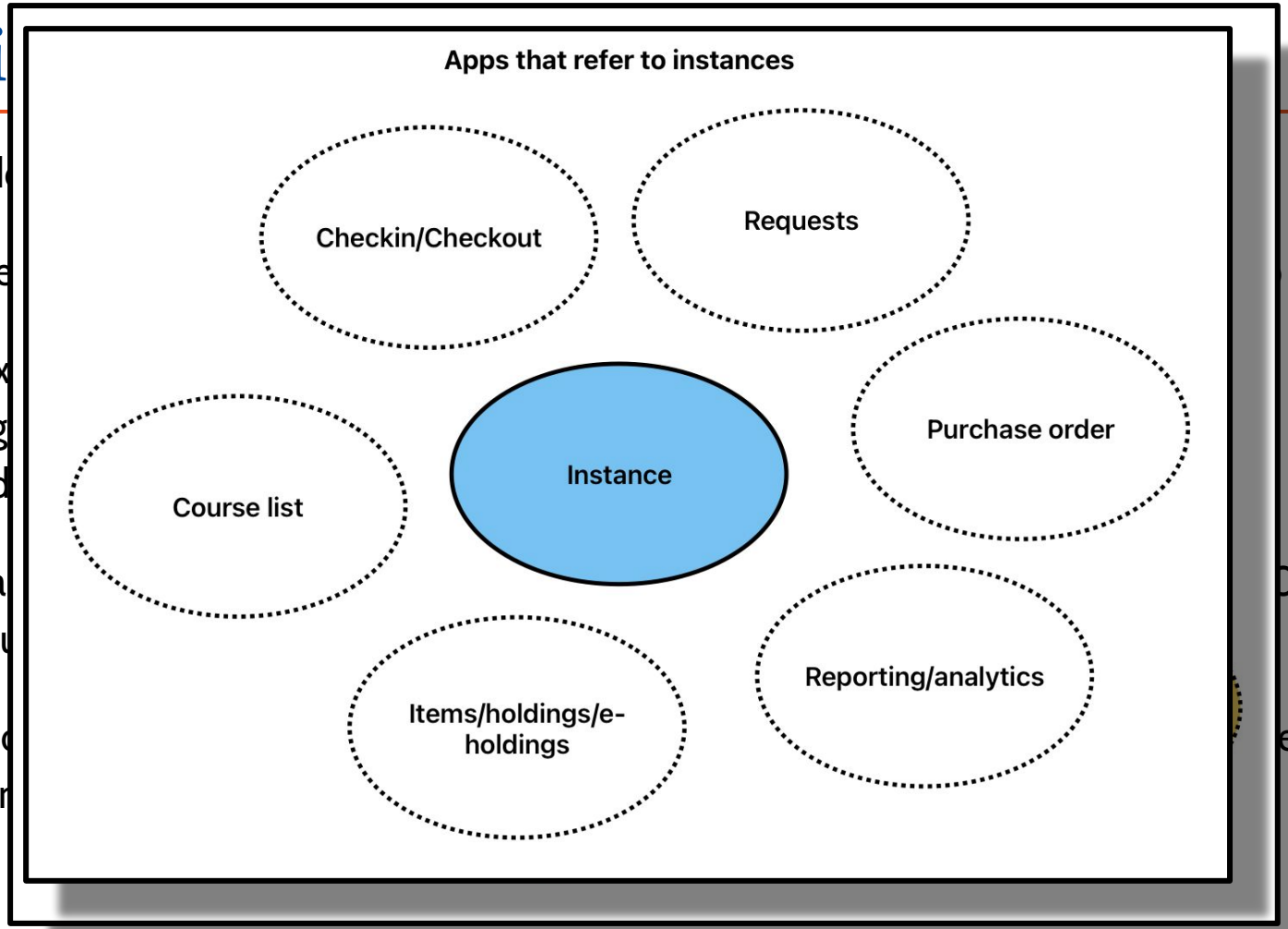
FOLIO was d mind

But what doe emerge

Non-ex
Open g
Open d

Share-VDE a DD
ecosystem ou

The integrati eryday
workflows, ar



What are we doing

Building an automated data flow from Share platform into FOLIO's inventory module and into VuFind

Experimenting with practical BIBFRAME workflows in designated collection(s)

Next:

Bi-directional data flows
Hybrid MARC/BIBFRAME workflows
Practical considerations, i.e. authentication
Other tools and integrations

Thank You!

quinn@indexdata.com, bon219@lehigh.edu

SVDE Ontology

Update—July 2024

Nancy Lorimer
ALA Annual 2024

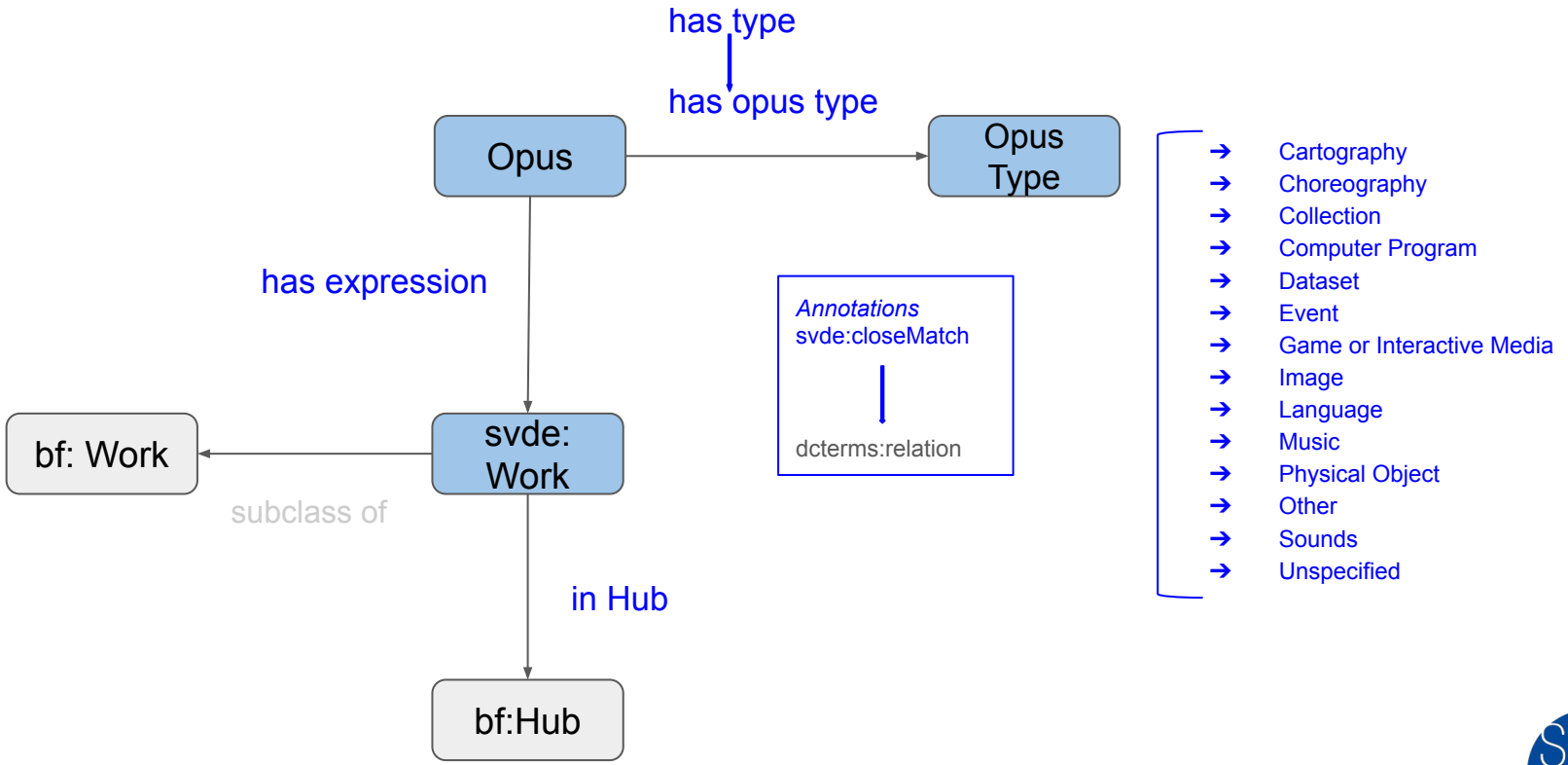
The Ontology

What the Ontology Is…

- extension to BIBFRAME to:
  - aid clusterization process of related BF works
    - originally MARC & originally BF
  - aid in the clusterization of works originating in other ontologies (RDA, etc.) into a BF environment
  - includes links & relationships to other ontologies when applicable

- a true extension to BF
  - all BF classes and properties remain in SVDE; nothing is replaced

Ontology Overview



Example: svde:hasExpression

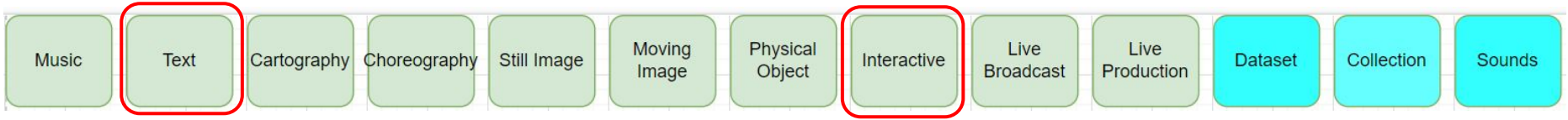
Property	hasExpression
Label	has expression
Domain	https://svde.org/ontology/Opus
Range	https://svde.org/ontology/Work
Definition	The relation from an Opus to a Work that represents an expression of that Opus.
svde:closeMatch	http://iflastandards.info/ns/lrm/lrmer/R2
svde:closeMatch	http://rdaregistry.info/Elements/w/P10078

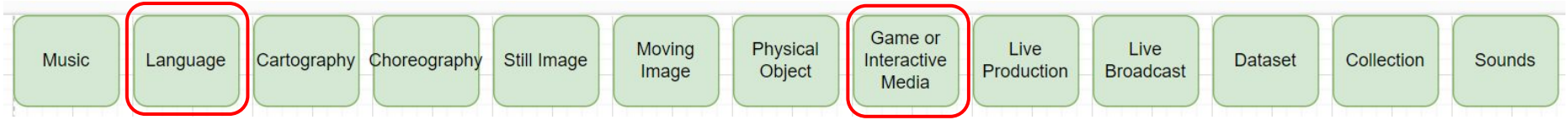
Opus Types

Why Opus Types?

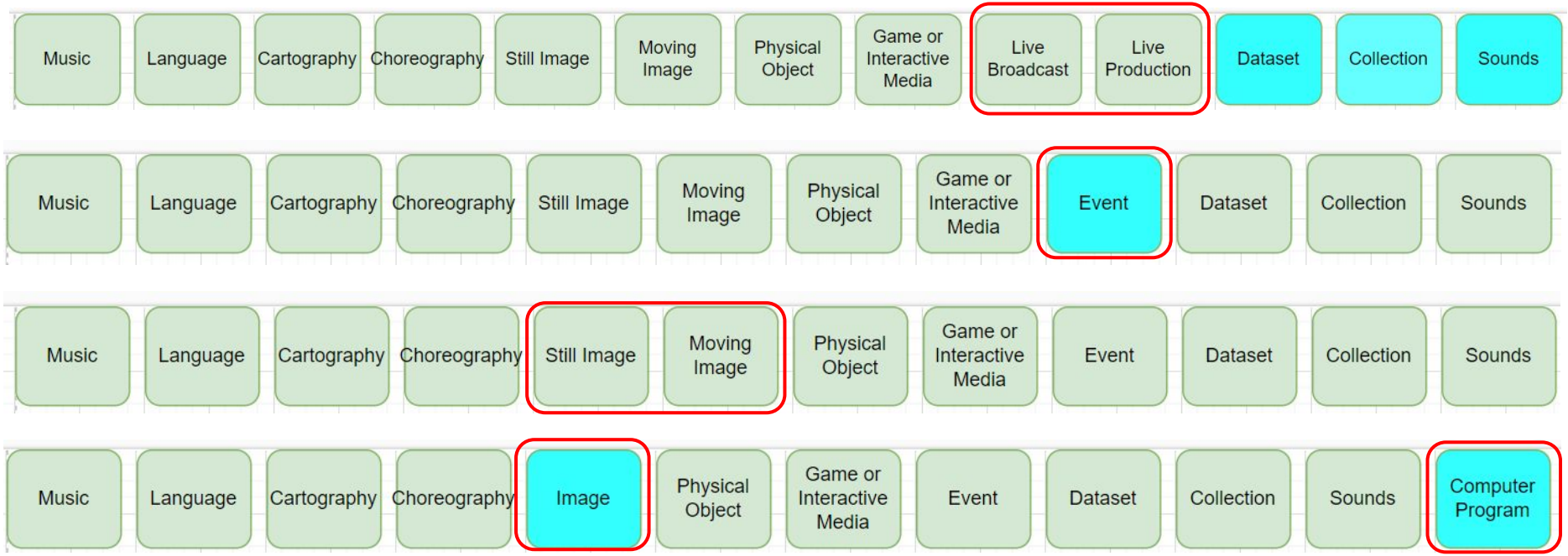
- clusterization using only the Opus by itself is imperfect
- adding Opus categories can improve clustering by adding another piece of data for the process
- also aids in relating a specific Opus to semantically related classes
  - in RDA
  - in schema
  - others potentially
- also useful to users, allowing them to see immediately what they are looking at

Evolution of Opus Types





Evolution of Opus Types, continued



Opus Types

Type Name	Label
CartographyOpus	Cartography
ChoreographyOpus	Choreography
CollectionOpus	Collection
ComputerProgramOpus	Computer Program
DatasetOpus	Dataset
EventOpus	Event
GameInteractiveMediaOpus	Game or Interactive Media
ImageOpus	Image
LanguageOpus	Language
MusicOpus	Music
PhysicalObjectOpus	Physical Object
SoundsOpus	Sounds
OtherOpus	Other
UnspecifiedOpus	Unspecified

Mappings

MARC21	OpusType	RDA Category of Work	RDA Content Type	BF Work	BF Content
Ldr/06 = e + 008/25 = a, b, c, e, f, g, z	cartography	cartographic	cartographic image, cartographic tactile image	Cartography	cartographic image, cartographic tactile image
Ldr/06 = f	cartography	cartographic	cartographic image	Cartography + Manuscript	cartographic image
Ldr/06 = e + 008/25 = d	cartography, physical object	cartographic	cartographic 3-dimensional form	Cartography + Object	cartographic three-dimensional form, cartographic tactile three-dimensional form
336 = notated movement; performed movement; tactile notated movement	choreography	choreographic	notated movement, performed movement, tactile notated movement	Notated Movement	notated movement, tactile notated movement
Ldr/06 = p	collection			Mixed Material	
Ldr/06 = m + 008/26 = b, f, h, j	computer program		computer program	Software or Multimedia	computer program
Ldr/06 = m + 008/26 = a, c, e	dataset		computer dataset	Dataset	computer dataset
Ldr/06 = m + 008/26 = a, c + 336 = cartographic dataset	dataset, cartography	cartographic	cartographic dataset	Dataset, Cartography	cartographic dataset
111, 611, 647	event			Event	
Ldr/06 = k + 008/33=g or w	game or interactive media	still image, object	still image, tactile image, three-dimensional form, tactile three-dimensional form	Still Image, Object	still image, tactile image, three-dimensional form
Ldr/06 = m + 008/26 = g, i	game or interactive media	moving image	three-dimensional moving image	Software or Multimedia	three-dimensional moving image
Ldr/06 = o	game or interactive media				
Ldr/06 = g + 008/33 = f, v	image	moving image	three-dimensional moving image, two-dimensional moving image	Moving Image	three-dimensional moving image, two-dimensional moving image
Ldr/06 = k + 008/33 = a, c, d, i, k, l, n, o, and/or t	image	photographic, still image	still image, tactile image	Still Image	still image, tactile image
Ldr/06 = g +008/33 = f, v + 336 = cartographic moving image	image, cartography	moving image, cartographic	cartographic moving image	Moving Image + Cartography	cartographic moving image
LDr/06 = a + 008/24-27 = g, j, l, v, w and/or z	language	textual	text, tactile text	Text	text, tactile text
LDr/06 = a + 008/24-27 = g, j, l, v, w and/or z	language	textual, legal	text, tactile text	Text	text, tactile text
Ldr/06 = i + 008/30-31 = a, b, c, d, e, f, g, h, i, j, k, l, m, o, p, r, t, z	language	vocal work, legal work	spoken word	Audio-NonMusicAudio	spoken word
Ldr/06 = m + 008/26 = d	language	textual	text	Text	text
Ldr/06 = t	language	textual	text, still image	Text + Manuscript	text
Ld4/06 = j	music	musical	performed music	Audio--MusicAudio	performed music
Ldr/06 = c	music	musical	notated music, tactile notated music	Notated Music	notated music, tactile notated music
Ldr/06 = d	music	musical	notated music	Notated Music + Manuscript	notated music
	other				other
Ldr/06 = r	physical object	object	cartographic three-dimensional form, tactile three-dimensional form, three-dimensional form	Object	cartographic three-dimensional form, tactile three-dimensional form, three-dimensional form
Ldr/06 = i + 008/30-31 = s	sound		sounds	Audio-NonMusicAudio	sounds
	unspecified				unspecified

The SHARE Catalogue: Unimarc-Bibframe Mapping

An evolving path

Claudio Forziati, University of Naples Federico II

SHARE Catalogue: Who we are

- Università degli studi di Napoli Federico II
- Università degli studi di Napoli L'Orientale
- Università degli studi di Napoli Parthenope
- Università degli studi di Salerno
- Università degli studi del Sannio
- Università degli studi della Basilicata
- Università degli studi della Campania Luigi Vanvitelli
- Università degli studi Suor Orsola Benincasa
- Università del Salento
- Università degli studi di Cassino e del Lazio Meridionale
- Scuola Superiore Meridionale

For further details please refer to
https://www.sharecampus.unina.it/

Share
FAMILY

SHARE Catalogue: What we do

SHARE Catalogue is part of a broader institutional agreement between these universities to share services and projects:
E.g.,

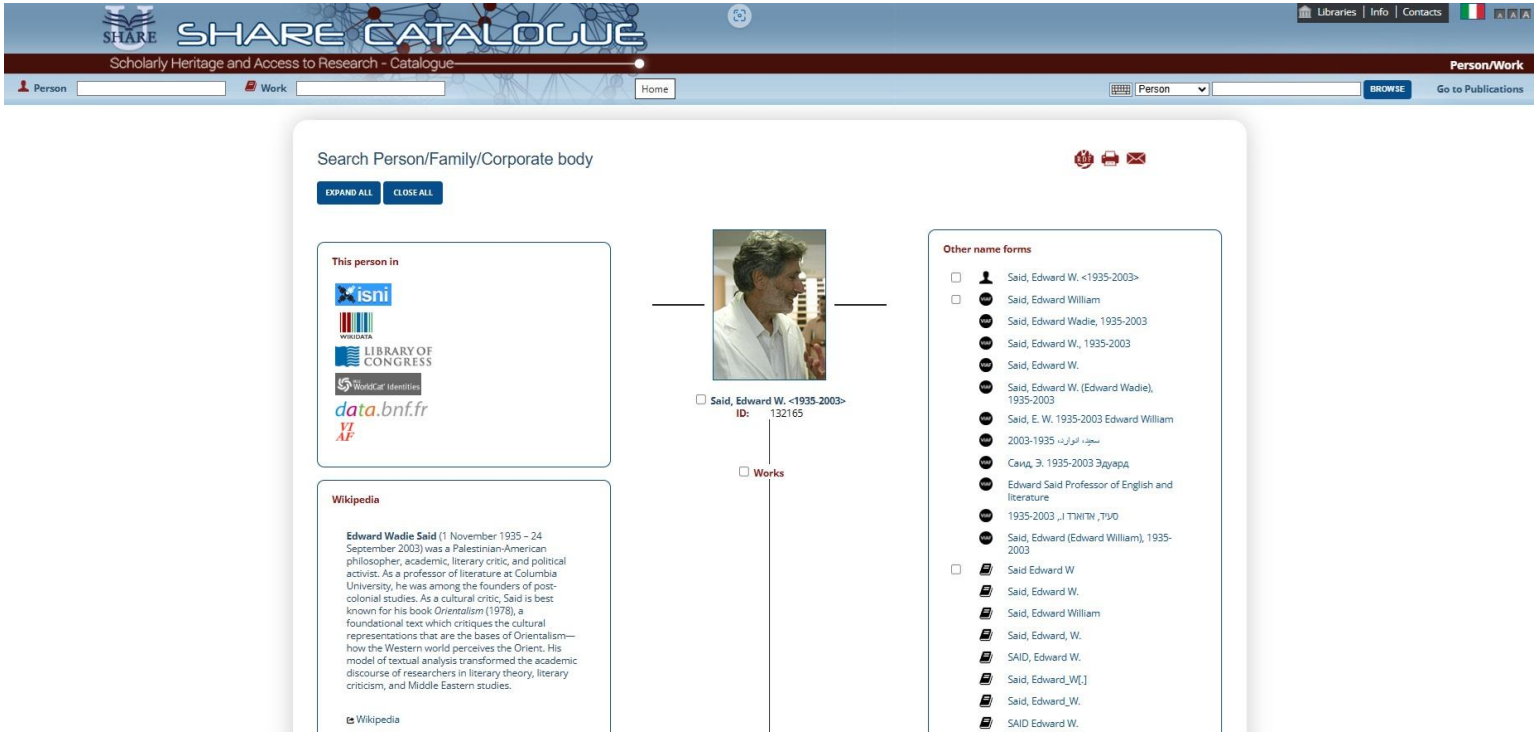
- On-site library services for their institutional users
- Shared platforms for digital publishing in Open Access

For further details please refer to
https://www.sharecampus.unina.it/

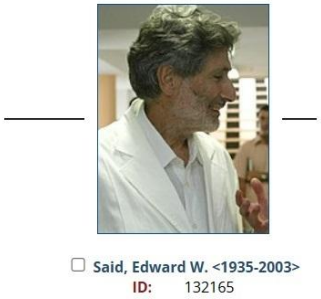
Share
FAMILY

SHARE Catalogue 1.0

SHARE Catalogue has been in production since 2016



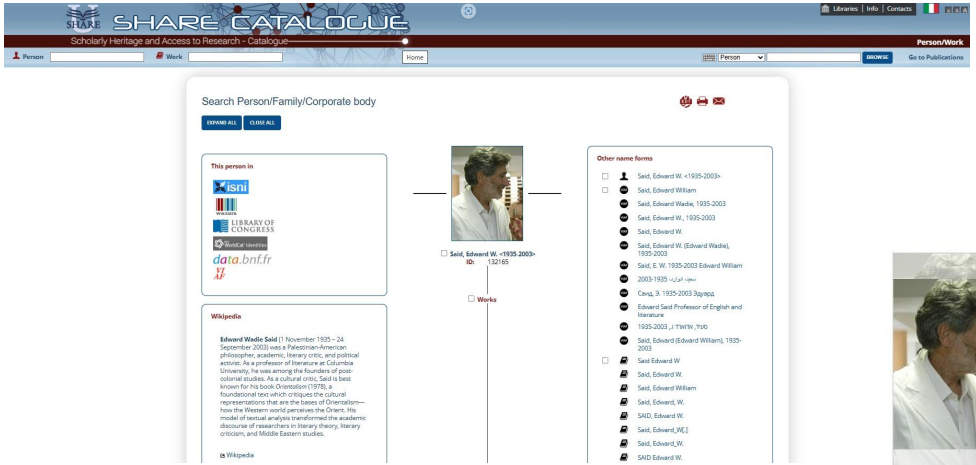
SHARE Catalogue 1.0 x Wikidata



- Provide context to metadata
  - https://w.wiki/ARRy and https://w.wiki/AQuL
- Provide access to public domain resources available in Wikimedia projects

- Easily find duplicates and try to correct them in the LSP used locally
- Interact with sources not used in the project (e.g. IdRef, ORCID, etc.)

How to achieve LOD Platform Evolution?



Most of the libraries in our LOD catalog use UNIMARC

Person

Said, Edward W.

Palestinian-American professor (1935–2003). Born in Jerusalem. Died in New York (N.Y.).

Edward Wadie Said was a Palestinian-American philosopher, academic, literary critic, and political activist. As a professor of literature at Columbia University, he was among the founders of post-colonial studies. As a cultural critic, Said is best known for his book Orientalism (1978), a foundational text which critiques the cultural representations that are the bases of Orientalism—how the Western world perceives the Orient. His model of textual analysis transformed the academic discourse of researchers in literary theory, literary criticism, and Middle Eastern studies. – Wikipedia

More options

Wikimedia Commons

Original works by | Publications by | Original works about

Filter original works... | Creator | Genre

135 results

No.	Title	Year	Genre	Creators
1	Edward Said reader		Biography/Essays	Said, Edward W. (author) Rubin, Andrew (other) Rubin, Andrew (other) Bayoumi, Moustafa (other)
2	Ra'aytu Rām Allāh		Autobiographies/Fiction	Barghūthī, Murīd (author) Souelf, Ahdaf (other) Said, Edward W. (other)
3	Scope of orientalism			Said, Edward W. (author)

By-pass the intermediate data transformations (namely, going through MARC 21)

UNIMARC - BIBFRAME 2.0 Mapping Sources

- MARC 21 to Bibframe 2.0 Conversion Specifications
- UNIMARC Bibliographic (3rd ed.) Updates 2009-2022
- UNIMARC to MARC 21 Conversion Specifications Version 3.0 (August 2001)
- REICAT (Italian cataloguing rules)
- Documentation for specific kinds of resources (e.g. Braidense Library for music special collections)

UNIMARC - MARC 21 Updated Analysis

Label	Indicator 2	Subfield	MARC21	Indicator 1	Indicator 2	MARC21 Subfields
215 - Physical description			**300 - Physical Description (R)**			
215 - Physical description	blank (not defined)		300 - Physical Description (R)	# - Undefined	# - Undefined	
215 - Physical description		$a - Specific Material Designation and Extent of Item (R)	300 - Physical Description (R)			$a - Extent (R)
215 - Physical description		$b - Materials and Technique display (NR)	300 - Physical Description (R)			$3 - Materials specified (NR)
215 - Physical description		$c - Other Physical Details (NR)	300 - Physical Description (R)			$b - Other physical details (NR)
215 - Physical description		$d - Dimensions (R)	300 - Physical Description (R)			$c - Dimensions (R)
215 - Physical description		$e - Accompanying Material (R)	300 - Physical Description (R)			$e - Accompanying material (NR)
215 - Physical description			300 - Physical Description (R)			*$f - Type of unit (R)*
215 - Physical description			300 - Physical Description (R)			*$g - Size of unit (R)*
215 - Physical description			300 - Physical Description (R)			*$6 - Linkage (NR)*
215 - Physical description			300 - Physical Description (R)			***$8 - Field link and sequence number (R)***
225 - Series			**490 - SERIES STATEMENT (R)**			
225 - Series			490 - SERIES STATEMENT (R)	Indicator 1 - Series tracing policy		
225 - Series			490 - SERIES STATEMENT (R)			
225 - Series			490 - SERIES STATEMENT (R)	1 - Series traced differently		
225 - Series			490 - SERIES STATEMENT (R)	0 - Series not traced		
225 - Series			490 - SERIES STATEMENT (R)			
225 - Series	blank (not defined)		490 - SERIES STATEMENT (R)		# - Undefined	
225 - Series		$a - Title (NR)	490 - SERIES STATEMENT (R)			$a - Series statement (R)
225 - Series		$d - Parallel Title (R)	490 - SERIES STATEMENT (R)			
225 - Series		$e - Other Title Information (R)	490 - SERIES STATEMENT (R)			
225 - Series		$f - Statement of Responsibility (R)	490 - SERIES STATEMENT (R)			
225 - Series		$g - Subsequent Statement of Responsibility (R)	490 - SERIES STATEMENT (R)			
225 - Series		$h - Number of a Part (R)	490 - SERIES STATEMENT (R)			
225 - Series		$i - Name of a Part (R)	490 - SERIES STATEMENT (R)			
225 - Series		$v - Volume Designation (R)	490 - SERIES STATEMENT (R)			$v - Volume number/sequential designation (R

UNIMARC - BIBFRAME 2.0 Mapping

Sometimes it was quite simple...

UNIMARC	MARC21 FIELDS	ATTRIBUTE
	Fields 3XX - Physical Description, etc. - v1.6, 06/01/2021	
215 - Physical Description	300 - PHYSICAL DESCRIPTION (R)	
	Subfield Codes	
a - Specific Material Designation and Extent of Item	$a - Extent (R)	I - extent - Extent
c - Other Physical Details	$b - Other physical details (NR)	I - note - Note rdf:type rdf:resource="http://id.loc.gov/vocabulary/mnotetype/physical"
d - Dimensions	$c - Dimensions (R)	I - dimensions - literal
e - Accompanying Material	$e - Accompanying material (NR)	I - note - Note rdf:type rdf:resource="http://id.loc.gov/vocabulary/mnotetype/accmat"
/	$f - Type of unit (R)	
/	$g - Size of unit (R)	

UNIMARC - BIBFRAME 2.0 Mapping

Sometimes it was quite simple...

UNIMARC	MARC21 FIELDS	ATTRIBUTE
135 - CDF: Electronic resources	**007--ELECTRONIC RESOURCE**	
	00 - Category of material	
135 - CDF: Electronic resources	c - Computer file	If MARC tag 337 $a does not exist, then I - media - Media - http://id.loc.gov/vocabulary/mediaTypes/c
$a/1 - Special material designation	01 - Specific material designation	If MARC tag 338 $a does not exist, then I - carrier - Carrier
a - cartridge magnetic tape	a - Tape cartridge	http://id.loc.gov/vocabulary/carriers/ca
b - computer chip cartridge	b - Chip cartridge	http://id.loc.gov/vocabulary/carriers/cb
c - computer optical disc cartridge	c - Computer optical disc cartridge	http://id.loc.gov/vocabulary/carriers/ce
d - computer disc, type unspecified	d - Computer disc, type unspecified	http://id.loc.gov/vocabulary/carriers/cd
e - computer disc cartridge, type unspecified	e - Computer disc cartridge, type unspecified	http://id.loc.gov/vocabulary/carriers/ce
f - computer magnetic cassette tape	f - Tape cassette	http://id.loc.gov/vocabulary/carriers/cf
/	h - Tape reel	http://id.loc.gov/vocabulary/carriers/ch
j - magnetic disk	j - Magnetic disk	http://id.loc.gov/vocabulary/carriers/ce
k - computer card	k - Computer card	http://id.loc.gov/vocabulary/carriers/ck

UNIMARC - BIBFRAME 2.0 Mapping

Sometimes a bit challenging...

545 SECTION TITLE

Field Definition and Scope

This field contains the title of a general section in which a piece-analytic being catalogued is contained.

Subfields & Occurrence

Field/Subfield	Field/Subfield Name	Repeatability	Occurrence
545	SECTION TITLE	R	O
a	Section Title	NR	O
e	Other Title Information	R	O
h	Number of Part	NR	O
i	Name of Part	NR	O
j	Volume or Dates Associated with Title	NR	O
n	Miscellaneous Information	NR	O
z	Language of Title	NR	O
2	Source	NR	O

Indicators

Indicator	Value	Description
1		Title Significance Indicator
	0	Section title is not significant
	1	Section title is significant
2	#	blank (not defined)

≈ ?

773 - Host Item Entry (R)

MARC 21 Bibliographic - Full

First Indicator
Note controller
0 - Display note
1 - Do not display note

Second Indicator
Display constant controller
- In
8 - No display constant generated

Subfield Codes

$a - Main entry heading (NR)
$b - Edition (NR)
$d - Place, publisher, and date of publication (NR)
$g - Related parts (R)
$h - Physical description (NR)
$i - Relationship information (R)
$k - Series data for related item (R)
$l - Data provenance (R)
$m - Material-specific details (NR)
$n - Note (R)
$o - Other item identifier (R)
$p - Abbreviated title (NR)
$q - Enumeration and first page (NR)
$r - Report number (R)
$s - Uniform title (NR)
$t - Title (NR)
$u - Standard Technical Report Number (NR)
$w - Record control number (R)
$x - International Standard Serial Number (NR)
$y - CODEN designation (NR)
$z - International Standard Book Number (R)
$3 - Materials specified (NR)
$4 - Relationship (R)
$5 - Institution to which field applies (NR)
$6 - Linkage (NR)
$7 - Control subfield (NR)
/0 - Type of main entry heading
/1 - Form of name
/2 - Type of record
/3 - Bibliographic level
$8 - Field link and sequence number (R)

345 ACQUISITION INFORMATION NOTE

345 ACQUISITION INFORMATION NOTE

Field Definition and Scope

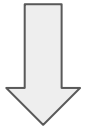
This field may contain the name and address of the publisher, distributor, or other source for acquisition. It may also include the stock number, the physical medium, and the terms of availability for the catalogued item or a different physical format version of the item.

Subfields & Occurrence

Field/Subfield	Field/Subfield Name	Repeatability	Occurrence
345	ACQUISITION INFORMATION NOTE	NR	O
a	Source for Acquisition/Subscription Address	R	O
b	Stock Number	R	O
c	Medium	R	O
d	Terms of Availability	R	O
u	Uniform Resource Identifier (URI)	R	O

Indicators

Indicator	Value	Description
1	#	blank (not defined)
2	#	blank (not defined)



541 - Immediate Source of Acquisition Note (R)

MARC 21 Bibliographic - Full

First Indicator
Privacy
- No information provided
0 - Private
1 - Not private

Second Indicator
Undefined
- Undefined

Subfield Codes
$a - Source of acquisition (NR)
$b - Address (NR)
$c - Method of acquisition (NR)
$d - Date of acquisition (NR)
$e - Accession number (NR)
$f - Owner (NR)
$h - Purchase price (NR)
$n - Extent (R)
$o - Type of unit (R)
$3 - Materials specified (NR)
$5 - Institution to which field applies (NR)
$6 - Linkage (NR)
$8 - Field link and sequence number (R)

037 - Source of Acquisition (R)

MARC 21 Bibliographic - Full

First Indicator
Source of acquisition sequence
- Not applicable/No information provided/Earliest
2 - Intervening
3 - Current/Latest

Second Indicator
Undefined
- Undefined

Subfield Codes
$a - Stock number (NR)
$b - Source of stock number/acquisition (NR)
$c - Terms of availability (R)
$f - Form of issue (R)
$g - Additional format characteristics (R)
$n - Note (R)
$3 - Materials specified (NR)
$5 - Institution to which field applies (R)
$6 - Linkage (NR)
$8 - Field link and sequence number (R)

UNIMARC	MARC21 FIELDS	ATTRIBUTE
345 - Acquisition Information Note	037 - SOURCE OF ACQUISITION (R)	I - acquisitionSource - AcquisitionSource
/	Indicators	
/	First - Source of acquisition sequence	
/	2 - Intervening	
/	3 - Current/Latest	
	Subfield Codes	
b - Stock Number	$a - Stock number (NR)	
a - Source for Acquisition/Subscription Address	$b - Source of stock number/acquisition (NR)	
d - Terms of Availability	$c - Terms of availability (R)	
c - Medium	$f - Form of issue (R)	
/	$g - Additional format characteristics (R)	
/	$n - Note (R)	

How to make the mapping available in open and structured form?

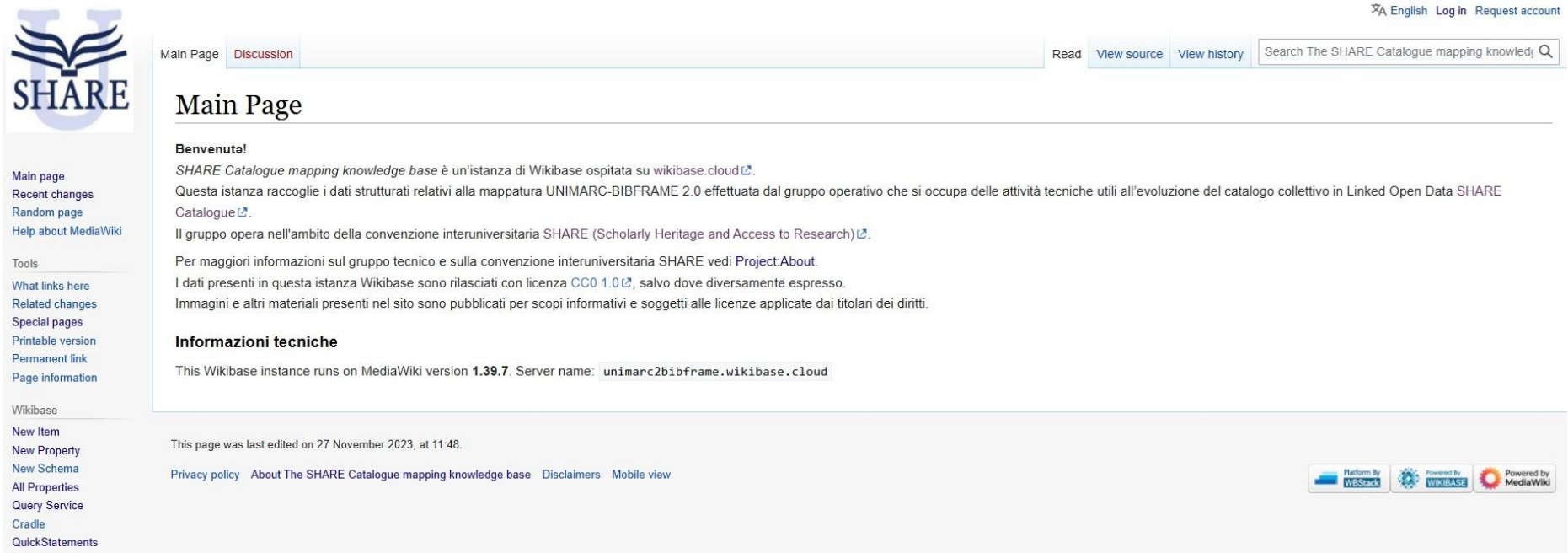
Why Wikibase.Cloud?

(M.O.R. Design for Wikimedia Deutschland, CC0, da Wikimedia Commons)
https://commons.wikimedia.org/wiki/File:Wikibase_Cloud_Vertical_2x_RGB.png

https://www.wikibase.cloud/

- It's Wikibase, the technology that makes Wikidata work!
- Easy-to-use basic user documentation
- No local procedures for updating and maintenance
- Pre-installed editing tools (QuickStatements, Cradle)
- Entities can be easily downloaded into various formats (JSON, ttl, RDF)
- Highly engaged and active community (mostly on Telegram)
- Please note: you cannot independently customize your wikis with advanced features... but you can always ask in Phabricator ;-)

SHARE Catalogue Mapping Knowledge Base



https://unimarc2bibframe.wikibase.cloud/

Wikibase Item Structure

215 Physical description (Q2032)

contains information on the physical characteristics of the resource. This field corresponds to the ISBD Material Description Area edit

In more languages

Statements

instance of	Bibliographic tag	edit
	0 references	add reference
		add value
is included in	2-- Descriptive information block	edit
	0 references	add reference
		add value
Indicator 1	blank (not defined)	edit
	0 references	add reference
		add value
Indicator 2	blank (not defined)	edit
	0 references	add reference
		add value
occurrence	optional	edit
	0 references	add reference
		add value
repeatability	repeatable	edit
	0 references	add reference

update used	2016	edit
	1 reference	
	reference URL: https://cdn.ifla.org/wp-content/uploads/files/assets/uca/unimarc_updates/BIBLIOGRAPHIC/b_215_update2016.pdf	
		add reference
		add value
includes	$a - Specific Material Designation and Extent	edit
	0 references	add reference
	$b - Materials and Technique Display	edit
	0 references	add reference
	$c - Other Physical Details	edit
	0 references	add reference
	$d - Dimensions	edit
	0 references	add reference
	$e - Accompanying Material	edit
	0 references	add reference
	$f - Weight	edit
	0 references	add reference
		add value
mapping described in tabular form at URL	https://unimarc2bibframe.wikibase.cloud/wiki/Project:Mapping_tables/UNIMARC_Bib_215	edit
	0 references	add reference
		add value

From item to wiki-table

215 Physical description (Q2032)

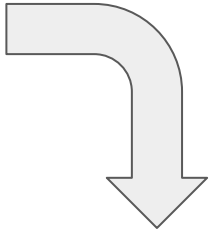
contains information on the physical characteristics of the resource. This field corresponds to the ISBD Material Description Area

mapping described in tabular form at URL	https://unimarc2bibframe.wikibase.cloud/wiki/Project:Mapping_tables/UNIMARC_Bib_215 edit

0 references

+ add reference

+ add value



Project:Mapping tables/UNIMARC Bib 215

< Project:Mapping tables

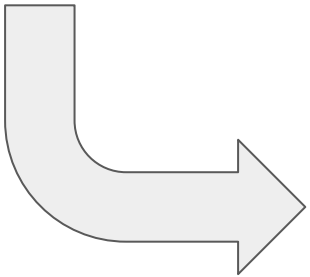
UNIMARC	MARC21 (Fields 3XX - Physical Description, etc. - v1.6, 06/01/2021)	BIBFRAME
215 - Physical Description	300 - PHYSICAL DESCRIPTION (R)	
	Subfield Codes	
a - Specific Material Designation and Extent of Item	$a - Extent (R)	l - extent - Extent
c - Other Physical Details	$b - Other physical details (NR)	l - note - Note rdf:type rdf:resource="http://id.loc.gov/vocabulary/mnotetype/physical"
d - Dimensions	$c - Dimensions (R)	l - dimensions - literal
e - Accompanying Material	$e - Accompanying material (NR)	l - note - Note rdf:type rdf:resource="http://id.loc.gov/vocabulary/mnotetype/accmat"
/	$f - Type of unit (R)	
/	$g - Size of unit (R)	

From wiki-table to external editable file

Project:Mapping tables/UNIMARC Bib 215

< Project:Mapping tables

UNIMARC	MARC21 (Fields 3XX - Physical Description, etc. - v1.6, 06/01/2021)	BIBFRAME
215 - Physical Description	300 - PHYSICAL DESCRIPTION (R)	
	Subfield Codes	
a - Specific Material Designation and Extent of Item	$a - Extent (R)	I - extent - Extent
c - Other Physical Details	$b - Other physical details (NR)	I - note - Note rdf:type rdf:resource="http://id.loc.gov/vocabulary/mnotetype/physical"
d - Dimensions	$c - Dimensions (R)	I - dimensions - literal
e - Accompanying Material	$e - Accompanying material (NR)	I - note - Note rdf:type rdf:resource="http://id.loc.gov/vocabulary/mnotetype/accmat"
/	$f - Type of unit (R)	
/	$g - Size of unit (R)	



UNIMARC BIB 215

File Modifica Visualizza Inserisci Formato Dati Strumenti Estensioni Guida

A1 =IMPORTHTML("https://unimarc2bibframe.wikibase.cloud/wiki/Project:Mapping_tables/UNIMARC_Bib_215";"table";1;"en_US")

	A	B	C	D	E	F
1	UNIMARC	MARC21 (Fields 3XX - Physical Description, etc. - v1.6, 06/01/2021)	BIBFRAME			
2	215 - Physical Description	300 - PHYSICAL DESCRIPTION (R)				
3		Subfield Codes				
4	a - Specific Material Designation and Extent of Item	$a - Extent (R)	I - extent - Extent			
5	c - Other Physical Details	$b - Other physical details (NR)	I - note - Note rdf:type rdf:resource="http://id.loc.gov/vocabulary/mnotetype/physical"			
6	d - Dimensions	$c - Dimensions (R)	I - dimensions - literal			
7	e - Accompanying Material	$e - Accompanying material (NR)	I - note - Note rdf:type rdf:resource="http://id.loc.gov/vocabulary/mnotetype/accmat"			
8	/	$f - Type of unit (R)				
9	/	$g - Size of unit (R)				
10						

New users will be welcome!

- We are in no hurry
- We will open it up to users who are willing to contribute
- It will be incomplete for some time to come but...

It’s a wiki!

It’s improvable by design \o/

Thank You!

claudio.forziati@unina.it

@Uomovariabile

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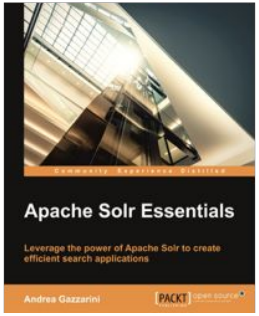
Real-Time "RDFization"

How to provide instant Semantic Graphs without any RDF Storage

Andrea Gazzarini, Share Family Lead Architect

I, Andrea Gazzarini

- Software Engineer (1999-)
- “Hermit” Software Engineer (2010-)
- Programming Passionate
- Information Retrieval Passionate
- Author of “Apache Solr Essentials”
- Apache Qpid (past) Committer
- Founder of SpazioCodice
- Share Family Lead Architect
- Husband & Father
- Bass Player
- Chapman Stick (still aspiring) Player



SOLRDF

CUMULUSRDF

Qpid

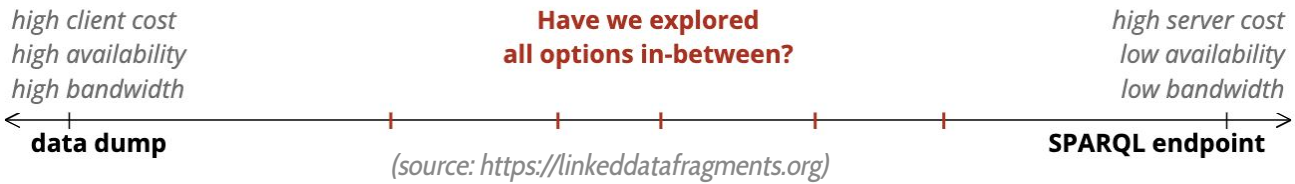
Share FAMILY

What are Linked Data Fragments?

#LD: Querying the Web of Data

RDF data can be provided using an **online SPARQL** Service. Such an endpoint offers clients powerful access to data. Yet, when the dataset grows, it comes with significant infrastructure costs: reliable and scalable SPARQL Servers are usually expensive.

On the other hand, RDF data can be downloaded and used locally. That involves local resources, which could be expensive in some cases as well.

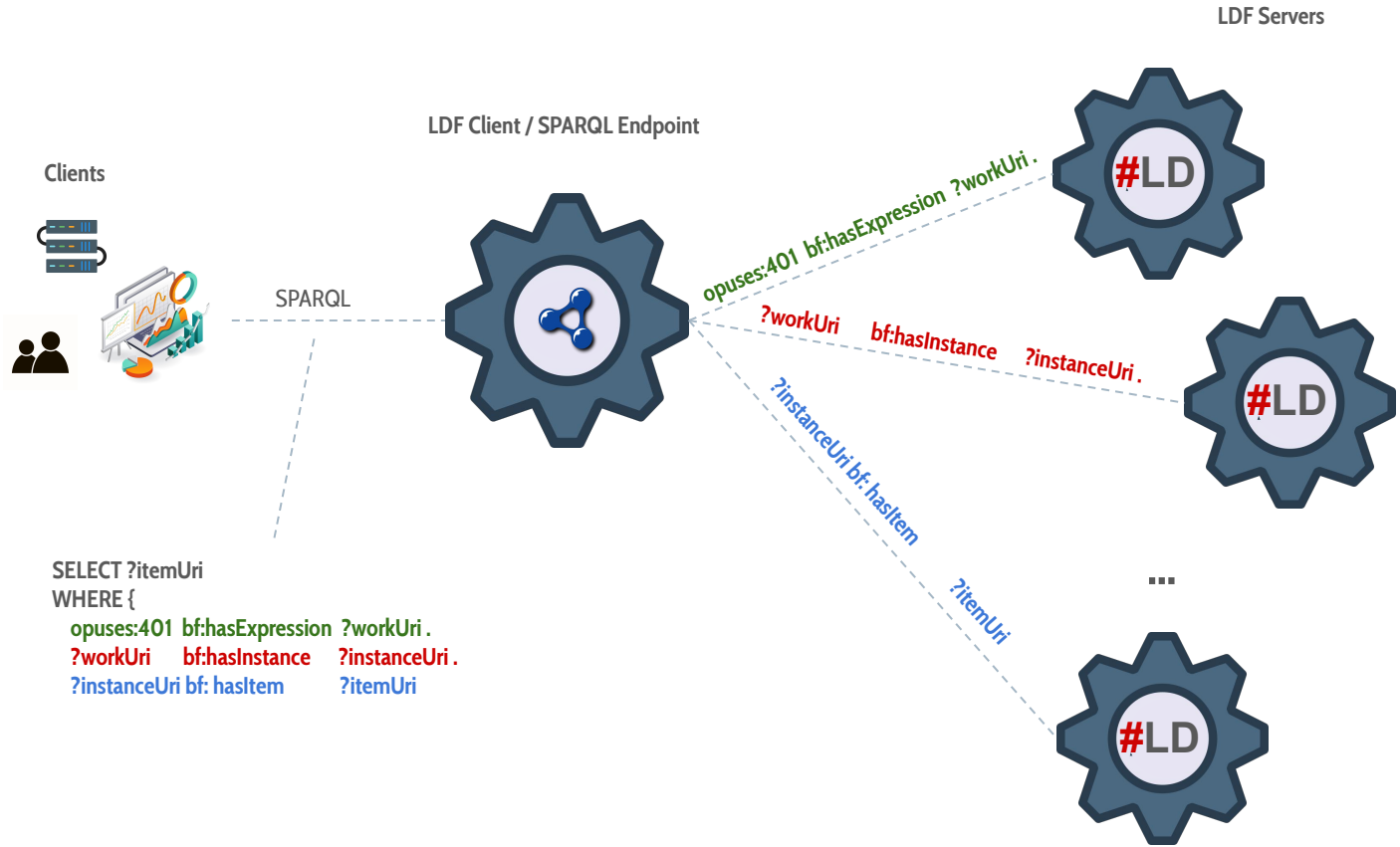


(source: https://linkeddatafragments.org)

How can we provide RDF data and, at the same time, reduce server resource consumption while maintaining efficient data querying?

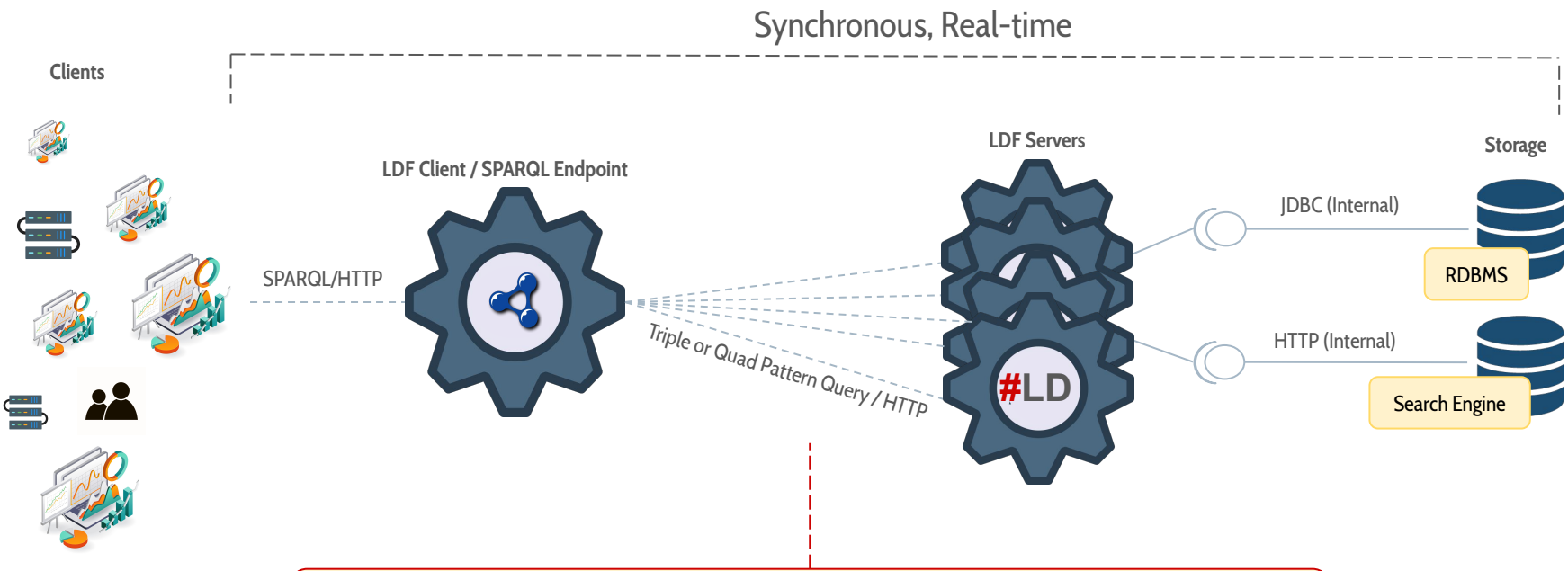
Linked Data Fragments represents an elegant approach that helps answer the question above. A Linked Data Fragments architecture **divides** the **query execution** and **computation** responsibilities among **two players**: a **Linked Data Fragment Client** that provides the **SPARQL endpoint**, the query **pre-processing**, its **optimization**, and the **destructuring** of such a query into a set of **atomic clauses** that can be executed independently towards **distributed Linked Data Fragment Servers**, the second role.

#LD: Moving intelligence from servers to clients



Linked Data Fragments in Share Family technology

Architecture



The **RDF representation** of the requested data **is created on the fly**, according to **one or more ontologies** that can be indicated in the request, as well.

#LD: Key Factors & Benefits

No RDF Storage

- We **no longer need** any RDF Storage: data is translated on demand, at query time.

Distributed Computation

- **Computation is distributed** across the **Linked Data Client** (the SPARQL endpoint) and the **Triple/Quads Pattern Server**
  - The **destructuration**, the **optimization/rewriting** of the SPARQL query is done in the **Linked Data Client**
  - The **execution** of each single t**riple/quad pattern** is done at **Linked Data Fragment Server** level
- The CKB is required to answer to a **lot of small and simple requests**, instead of dealing with **one huge query**

Query Time

- **Less redundancy**: the ingestion pipeline stores data only in the database and in the inverted index
- **Request-driven results**: no fixed mapping, **different queries** can request a **different mapping** in results
- **Request-driven results**: the same query, can **selectively ask for specific provenance data**
- **Federated search** is natively enabled (e.g. you can link the CKB with Wikidata or DbPedia entities)

Thank you!

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