ID.LOC.GOV

http://id.loc.gov
Library of Congress's Vocabulary and Authority Linked Data Service

Kevin Ford
NDMSO, Library of Congress
kefo@loc.gov

12 January 2012
CENDI
Library of Congress, Washington, DC

ID: What is it?

ID makes LC owned or maintained authorities and vocabularies available as Linked Data.

LC Subject Headings (May 2009)
LC Children's Subject Headings (May 2009)
LC Genre Forms Terms (June 2011)
LC Name Authority File (August 2011)

MARC Relators (June 2010)
MARC Geographic Areas (January 2011)
MARC Countries (January 2011)
MARC Languages (January 2011)

Thesaurus of Graphic Materials (June 2010)
PREMIS – Preservation Level Role (June 2010)
PREMIS – Preservation Events (June 2010)
PREMIS – Cryptographic Hash Functions (June 2010)

ISO 639-1 (January 2011)
ISO 639-2 (January 2011)
ISO 639-5 (January 2011)

Common Terms

Semantic Web

Various methods and technologies designed to describe information (on the World Wide Web) so that it is machine understandable

RDF – Resource Description Framework

Essentially a metadata data model, but has also been accepted as a method for the conceptual description and modelling of information resources

Triples

The form RDF statements take
Subject-predicate-object

Linked Data

Data offered in such a way as to facilitate linking

LD: Principles

Four basic rules

1) Identify things with URIs

2) Use HTTP uris
Dereference them

3) Make the data available
Not just as a bulk download,
but as individual resources over the web

4) Link the data to other data
External links
Internal links

ID: What is it?

Agroforestry

Here are entered works on any sustainable land use system that maintains or increases total yields by combining agricultural crops, tree crops, forest trees, and/or livestock on the same unit of land, either alternately or at the same time, using management practices that suit the social and cultural characteristics of the local people and the economic and ecological conditions of the area.

URI(s)
- http://id.loc.gov/authorities/subjects/sh85002507
- info:lc/authorities/sh85002507
- http://id.loc.gov/authorities/sh85002507#concept

Instance Of
- MADS/RDF Topic
- MADS/RDF Authority
- SKOS Concept

Scheme Membership(s)
- Library of Congress Subject Headings

Collection Membership(s)
- LCSH Collection - Authorized Headings
- LCSH Collection - General Collection
- LCSH Collection - Term Permitted to be Indirectly Subdivided Geographically

Variants
- Agro-forestry

Broader Terms
- Agriculture
- Forests and forestry

Related Terms
- Tree crops

Exact Matching Concepts from Other Schemes
- http://lod.nal.usda.gov/nalt/5256
- http://stitch.cs.vu.nl/vocabularies/rameau/ark:/12148/cb12003291v

Closely Matching Concepts from Other Schemes
- http://d-nb.info/gnd/4273558-0

Sources
- found: Work cat.: Majisu, L. A selected bibliography of agroforestry, 1982.
- found: Biol. & agr. index: v. 36, p. 46 (Agroforestry see Forests & forestry) v. 35, p. 635, under forests and forestry topics (Agroforestry ...)
- found: LC database, Feb. 7, 1984 (Agroforestry, agro-forestry)
- found: Kenya National Seminar on Agroforestry (1980 : Nairobi, Kenya). Kenya National Seminar on Agroforestry, Nairobi, Kenya, 12-22 November 1980, 1981.

LC Classification
- S494.5.A45

General Notes
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Change Notes
- 1986-02-11: new
- 1997-08-26: revised

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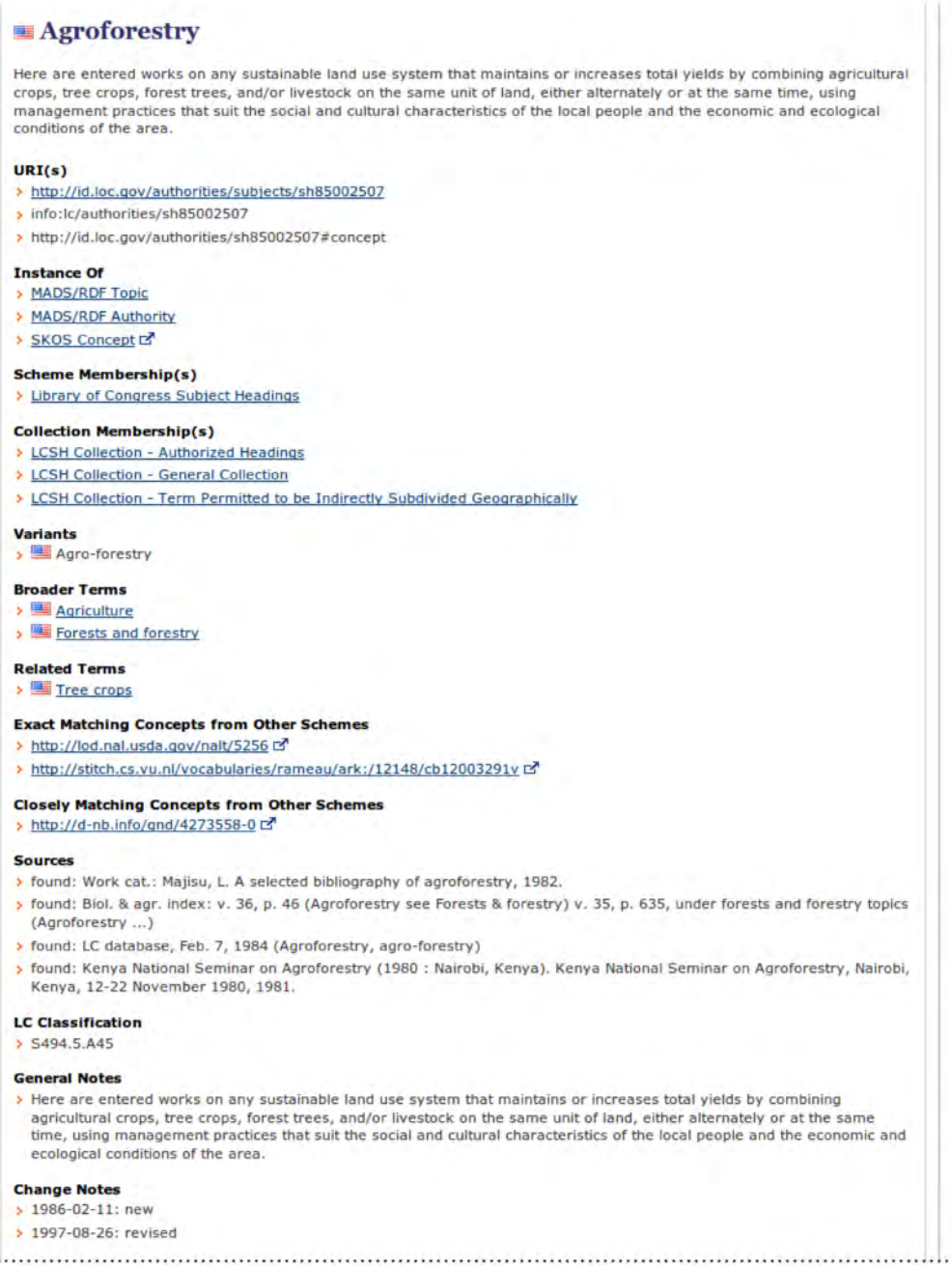
Various notes



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Change Notes
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- 1997-08-26: revised

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ID: What is it?

Details | Visualization | Suggest Terminology

Poisonous spiders--Venom

URI(s)
- http://id.loc.gov/authorities/subjects/sh85126627
- info:lc/authorities/sh85126627
- http://id.loc.gov/authorities/sh85126627#concept

Instance Of
- MADS/RDF ComplexSubject
- MADS/RDF Authority
- SKOS Concept

Components
- Poisonous spiders
- Venom

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Variants
- Spider venom
- Spiders--Venom

Earlier Established Forms
- Spiders--Venom

Change Notes
- 2002-05-07: new
- 2002-06-18: revised

Alternate Formats
- RDF/XML (MADS and SKOS)
- N-Triples (MADS and SKOS)
- JSON (MADS/RDF and SKOS/RDF)
- MADS - RDF/XML
- MADS - N-Triples
- MADS/RDF - JSON
- SKOS - RDF/XML
- SKOS - N-Triples
- SKOS - JSON
- MADS/XML
- MARC/XML

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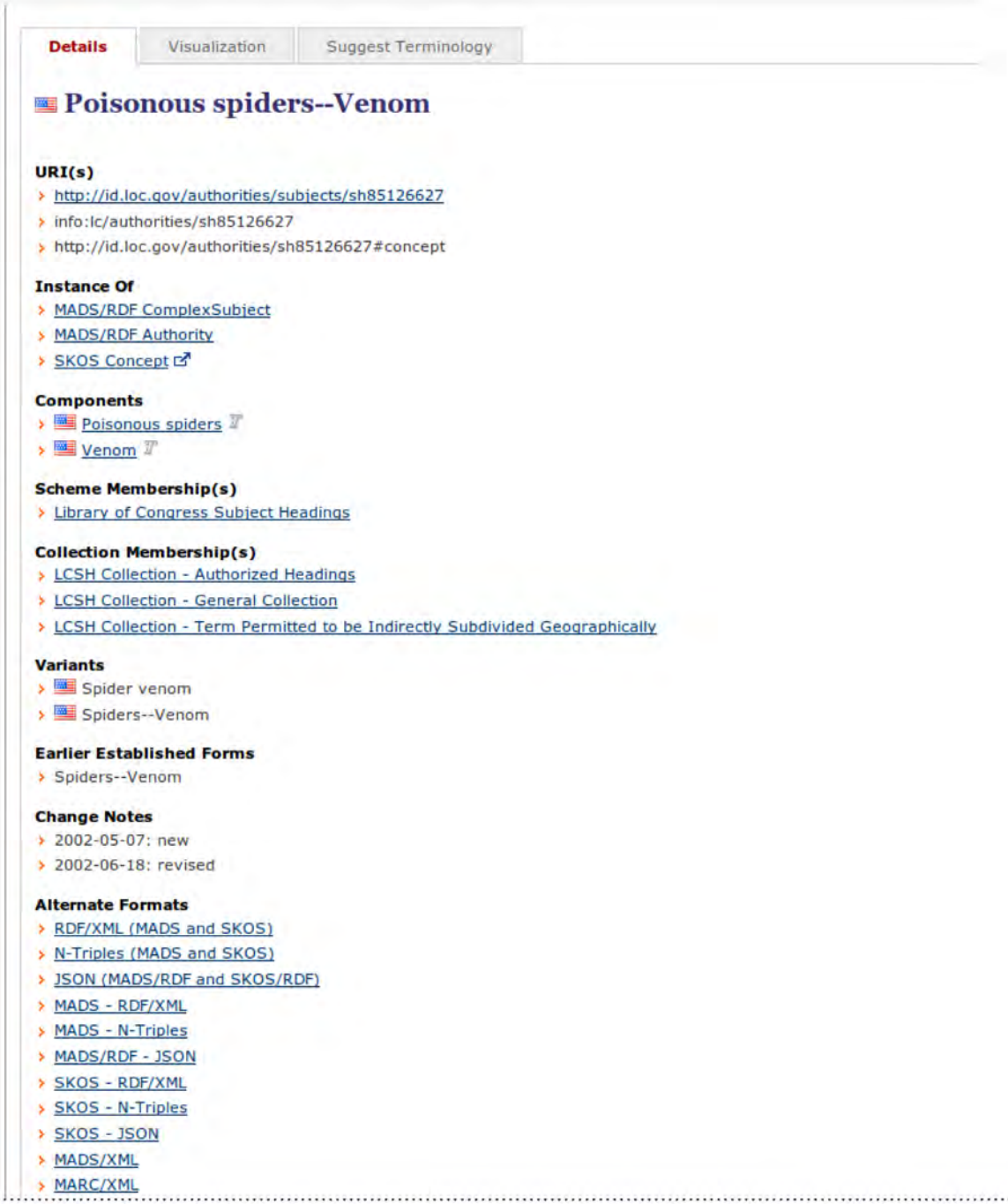
ID: What is it?

Components



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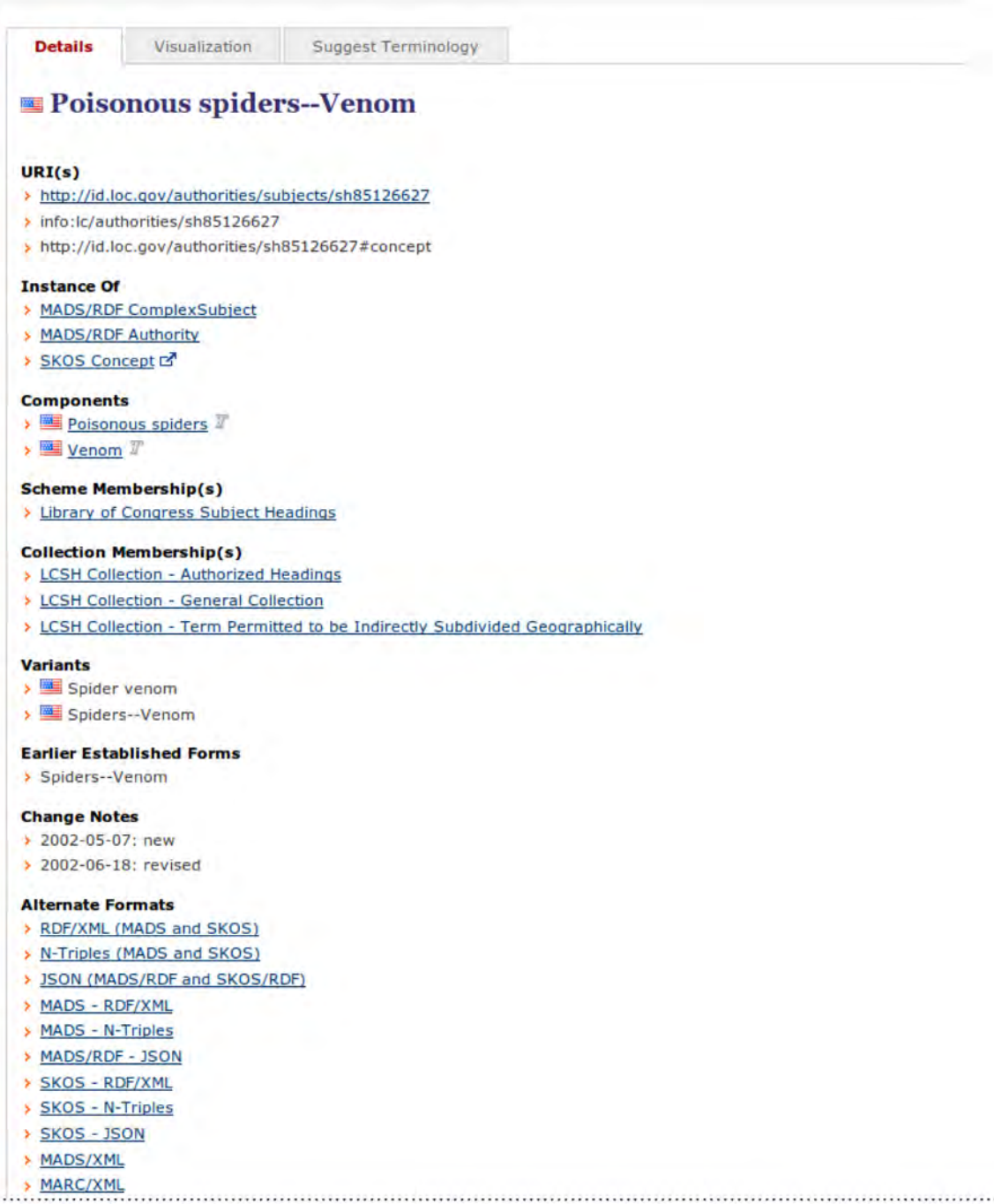
ID: What is it?

Components

Many formats,
Many serializations



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ID: What's Offered

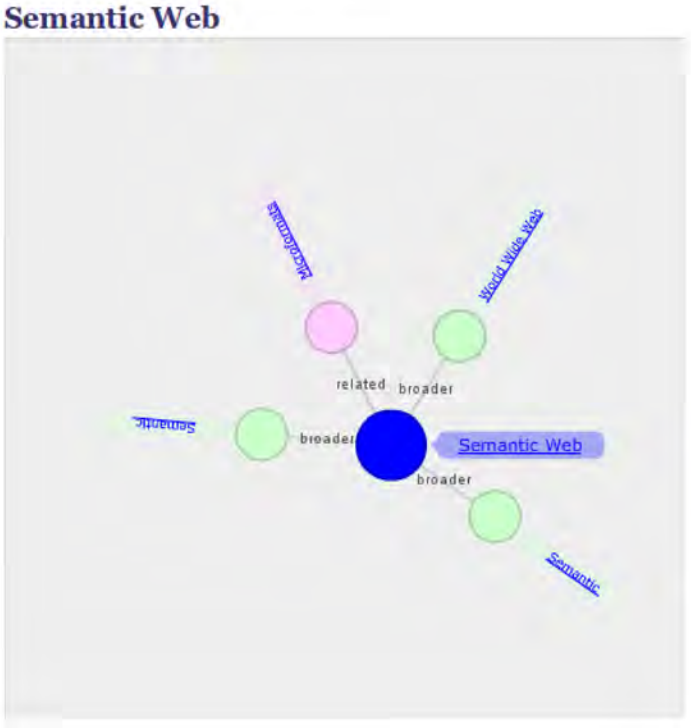
Bulk downloads of each authority and vocabulary

LC Genre/Form Terms	11 Aug 2011	279 (kb)	rdfxml
LC Genre/Form Terms	11 Aug 2011	232 (kb)	ttl
LC Name Authority File (MADS/RDF only)	20 Dec 2011	2631542 (kb)	nt
LC Name Authority File (MADS/RDF only)	20 Dec 2011	2807547 (kb)	rdfxml
LC Subject Headings (MADS/RDF only)	11 Aug 2011	126270 (kb)	nt

ID: What's Offered

Other features

Dereferenced URIs
UI search and discovery (all or specific vocabularies)
Type-ahead for all vocabularies
ATOM feed for all vocabularies
Services
    ATOM feed for search results
    Known-label search
Visualization
SKOS/RDF (W3C)
MADS/RDF (LC)
MARC/XML
MADS/XML (LC)



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ID: How it's used

RAMEAU

Part of MACS (Multi-lingual Access to Subjects) project
Determined skos:closeMatch resources between RAMEAU and LCSH
Both RAMEAU and LCSH cross linked

Concept information

URI	http://stitch.cs.vu.nl/vocabularies/rameau/ark:/12148/cb11932889r
prefLabel	x-notation: FRBNF119328898 fr: Oiseaux

Similar concepts from other vocabularies

› <http://stitch.cs.vu.nl/vocabularies/rameau/ark:/12148/cb11932889r>

Mappings (simple SKOS statements)

Mapping Relation	Concept
closeMatch	http://id.loc.gov/authorities/sh85014310#concept

Mappings (OAEI cells)

Concept as left hand side

URI	Link to details	prefLabel	Mapping Relation
http://id.loc.gov/authorities/sh85014310#concept	details	http://id.loc.gov/authorities/sh85014310#concept	http://www.w3.org/2004/02/skos/core#closeMatch
http://id.loc.gov/authorities/sh85014310#concept	details	http://id.loc.gov/authorities/sh85014310#concept	http://www.w3.org/2004/02/skos/core#closeMatch

ID: How it's used

National Library Sweden

Unreleased/published Linked Data component of catalog
Links to LCSH

Swedish subject heading: "Mödrar"

Broader terms
Föräldrar
Narrower terms
Ensamstående mödrar
Lesbiska mödrar
Soldatmödrar
Styvmödrar
Surrogatmödrar
Unga mödrar
Yrkesarbetande mödrar
Related terms
Gravida kvinnor
Mor-barnrelationer
LCSH:
Mothers http://id.loc.gov/authorities/sh85087526
misc.
text/rdf+n3
application/rdf+xml
OpenLink RDF browser

ID: How it's used

Ethan Gruber, University of Virginia

Data used in cataloging application
Indexed with Solr (Lucene)
XForms application with autosuggest feature
Data loaded locally – harvested weekly

ID: How it's used

John Ocklerbloom, University of Pennsylvania
Online Books

Used LCSH bulk download, manipulated for local needs
Integrated with OPAC records
Broadens user search/discovery experience

Medicine, Botanic

Here are entered works on a 19th century system of medicine developed by Samuel Thomson and based on the use of plant remedies.

Broader terms:

- Alternative medicine
- Medicine

Used for:

- Botanic medicine
- Thomsonianism

Filed under: Medicine, Botanic

A Guide to Health, Being an Exposition of the Principles of the Thomsonian System of Practice, and Their Mode of Application in the Cure of Every Form of Disease (1846 edition), by Benjamin Colby (text and PDF with commentary at swsbm.com)

Life and Medical Discoveries of Samuel Thomson, and a History of the Thomsonian Materia Medica, As Shown in "The New Guide to Health" (1835), and the Literature of That Day (1909), by John Uri Lloyd and Samuel Thomson (PDF at swsbm.com)

Items below (if any) are from related and broader terms.

Filed under: Alternative medicine

Natural Liberty: Rediscovering Self-Induced Abortion Methods (Creative Commons licensed edition, c2008), by Sage-Femme Collective (Javascript-dependent Flash at scribd.com)

What's Ahead

New Datasets

PREMIS Vocabs
MARC Organizations
Other MARC Source Lists

New Functionality

Search limits (by contributing agency, e.g., but also resource type, etc)
Faceted Search (UI addition)
Search ordering

LINKING!

Associating Concepts and Names with LC (and external) Resources

ID – Thank You

Thank you.

Questions? Comments?

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