coli-conc & BARTOC

The story of a partnership
and
the future of Knowledge Organization Systems

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EDUG 2021

What is coli-conc?

- **An open-source service of the VZG that offers**
  - Interoperability between Knowledge Organization Systems
  - Technical infrastructure to exchange and manage KOS data, KOS metadata, and KOS mappings
  - Facilitate creation of KOS Mappings

- **Serves as the framework for the integration of BARTOC into coli-conc**

What does coli-conc infrastructure provide?

- Mapping Tool with a Web Application - Cocoda

User and Editor Interface to KOS, Concordances and mappings

- KOS-Registry
- Concordance-Registry

Backend Services

- Terminology Services (DANTE, BARTOC, SKOSMOS, MARCXML…)
- Mapping Services and Database (Collected KOS Mappings)
- Mapping Recommendation Services (Co-occurrences and queries)
- Quality services and Statistics
- **Data Format - JSKOS**

What is BARTOC?

Basic Register of Thesauri, Ontologies & Classifications (BARTOC)

founded as “Basel Register…” by Andreas Ledl, University of Basel in 2013

- A database of Knowledge Organization Systems (KOS)
- Unified access to metadata of currently 3,300 KOS
- Various spheres and subject areas
- Aims to foster knowledge sharing

What does BARTOC contain?

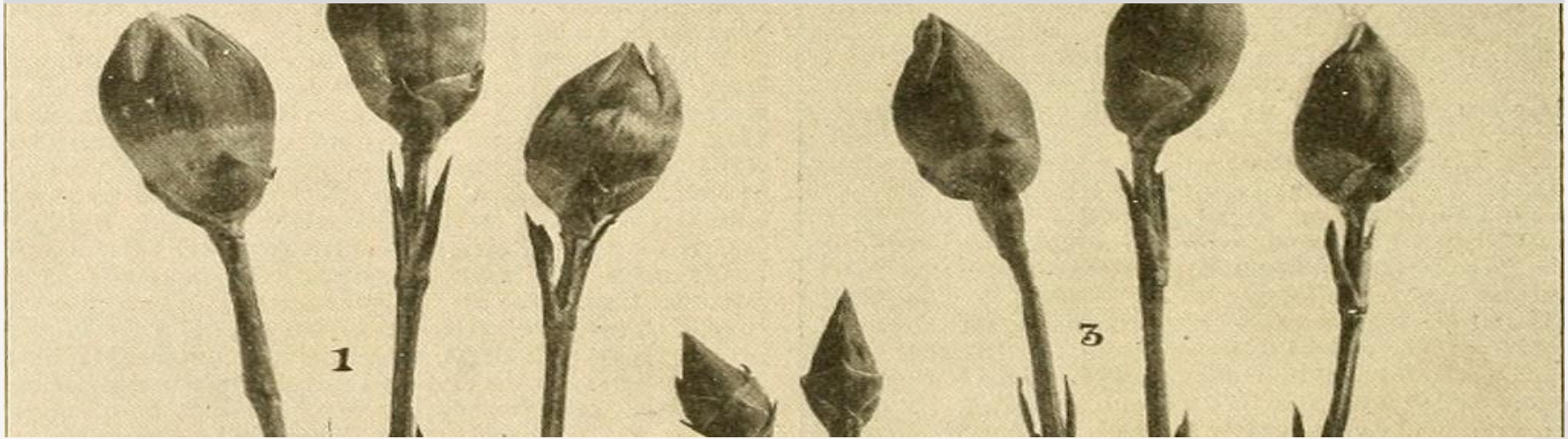
Vocabulary Metadata

- About the Vocabulary (abstract, publisher, subject…)
- Access-related information (formats, license…)
- Content (languages, size, search & browsing)
- Identifiers and technical metadata

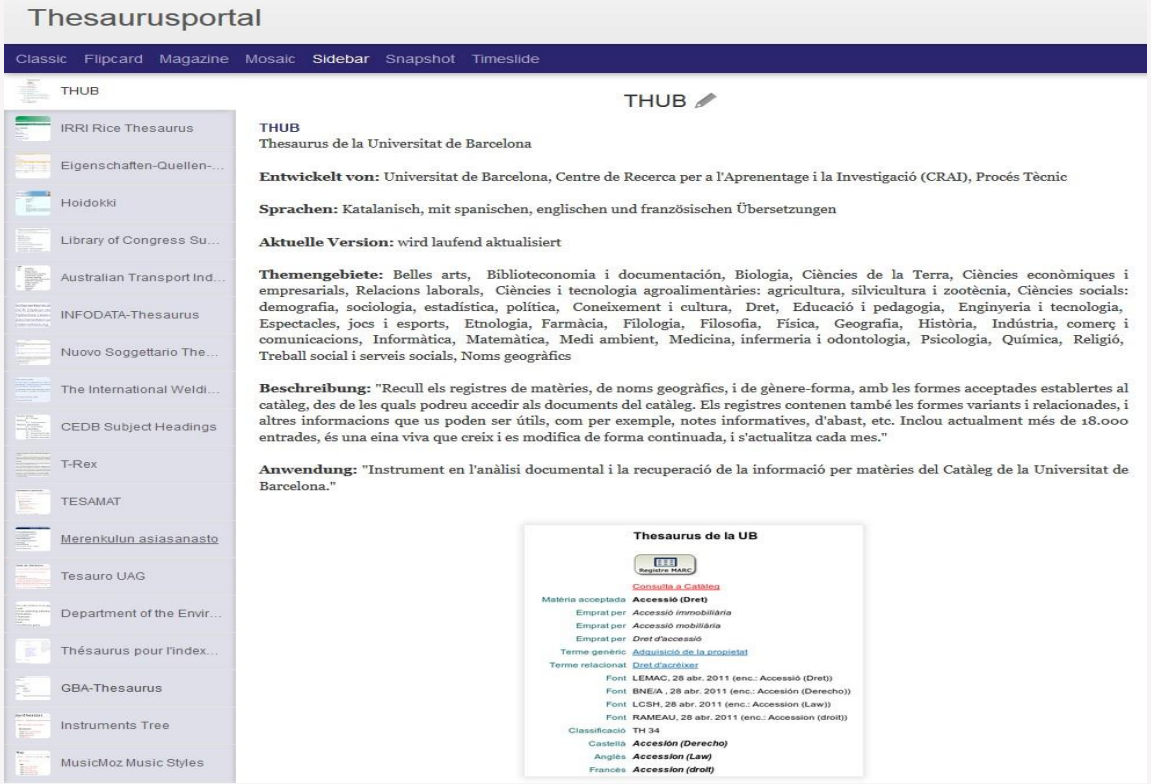
Background Service

- KOS Registries
- KOS Software
- Statistics

BARTOC Yesterday



Inetbib 2012- Announcement of Thesaurusportal



Andreas Ledl, SI &IT Workshop, VZG 2017

Re: [InetBib] Thesaurusportal

- *Date*: Tue, 23 Oct 2012 11:07:36 +0200
- *From*: Jakob Voss <jakob.voss@xxxxxx>
- *Subject*: Re: [InetBib] Thesaurusportal

On 19.10.2012 11:32, Andreas Ledl wrote:

> das Thesaurusportal http://thesaurusportal.blogspot.com enthält
> gegenwärtig 350 Thesauri aus verschiedensten Fachgebieten in 47 Sprachen.
>
> Ziel ist es, möglichst viele frei zugängliche bzw. über
> wissenschaftliche Bibliotheken erreichbare Online-Thesauri an einem Ort
> zu versammeln.
>
> Das Thesaurusportal soll als Unterstützung bei der Suche nach
> Indexierungsinstrumenten, der Entwicklung von Ontologien, der
> Vermittlung von Informationskompetenz uvm. dienen.
>
> Sie können im Thesaurusportal (eigentlich ein Blog) entweder mittels
> Freitextsuche oder anhand der "Labels" im verborgenen Menü auf der
> rechten Seite oben (dunkelgrauer Balken) recherchieren. Auf der linken
> Seite kann man die Thesauri "durchscrollen".

Vielen Dank für die Umfangreiche Sammlung. Sie sollten allerdings auch ähnliche oder ergänzende Angebote wie http://museumsvokabular.de hinweisen, damit das Thesaurusportal keine Insel bleibt.

Für die weitere Nutzung wäre die Weitergabe als Datenbank hilfreich. Unter https://gist.github.com/3937752 habe ich ein Perl-Skript erstellt, mit dem der Atom-Feed des Blogs verarbeitet wird. So ließe sich beispielsweise eine Excel-Tabelle o.Ä. erzeugen. Wenn Sie einer Veröffentlichung beispielsweise unter CC-BY-SA Zustimmen, kann auch auch das Ergebnis zur Verfügung stellen, so dass die Sammlung weitergehend genutzt werden kann.

Schöne Grüße
Jakob Voß

--
Jakob Voß <jakob.voss@xxxxxx>, skype: nichtich
Verbundzentrale des GBV (VZG) / Common Library Network
Platz der Goettinger Sieben 1, 37073 Göttingen, Germany
+49 (0)551 39-10242, http://www.gbv.de

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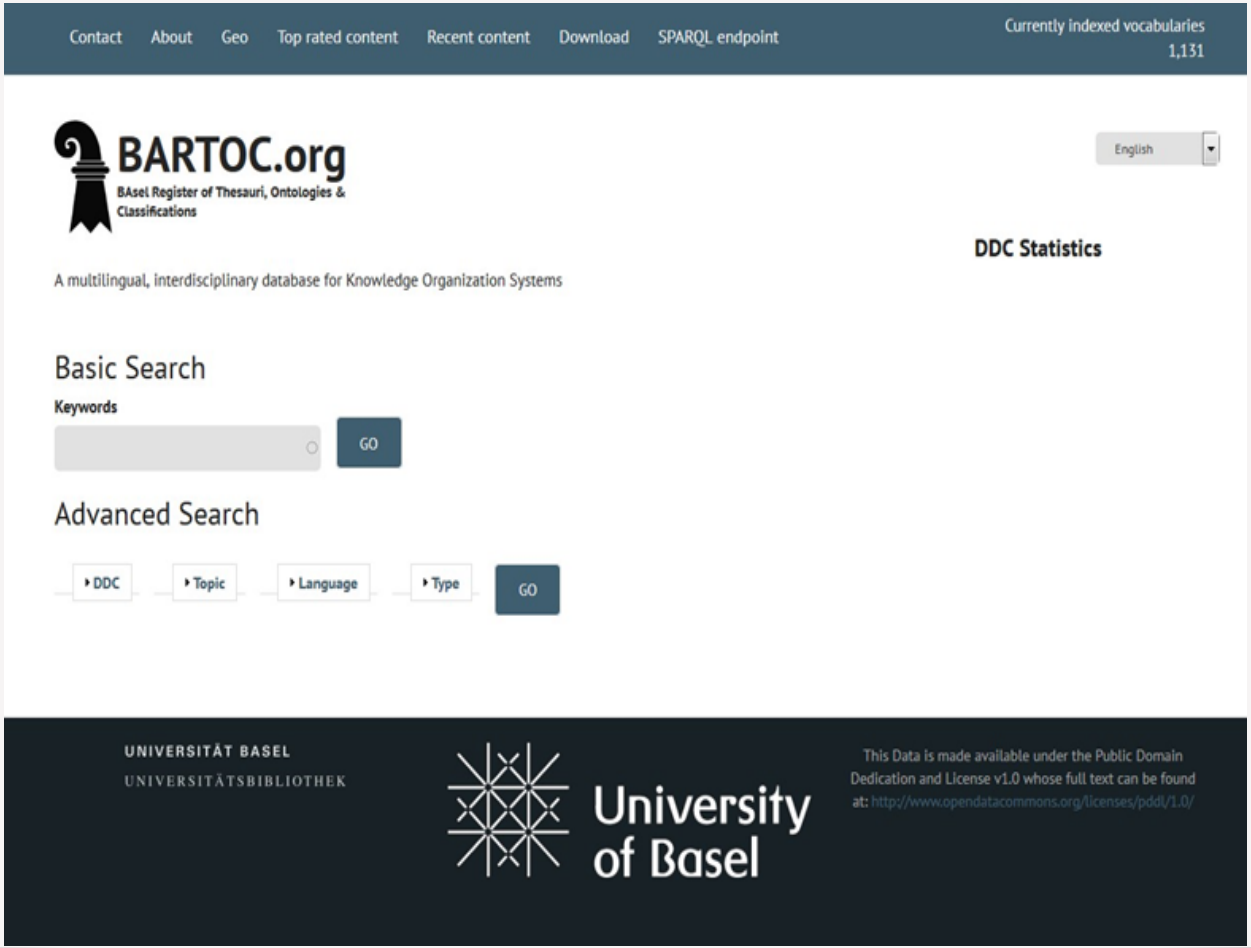
http://www.inetbib.de

2013: Launch of BARTOC


Contact
About
Geo
Top rated content
Recent content
Download
SPARQL endpoint
Currently indexed vocabularies
1,131
BARTOC.org
BAsel Register of Thesauri, Ontologies & Classifications
English
DDC Statistics
A multilingual, interdisciplinary database for Knowledge Organization Systems
Basic Search
Keywords
GO
Advanced Search
DDC
Topic
Language
Type
GO
UNIVERSITÄT BASEL
UNIVERSITÄTSBIBLIOTHEK
University of Basel
This Data is made available under the Public Domain Dedication and License v1.0 whose full text can be found at: http://www.opendatacommons.org/licenses/pddl/1.0/

Neue freie Datenbank in der Digitalen Bibliothek: BARTOC

Neu in die Digitale Bibliothek der FU aufgenommen wurde das Basel Register of Thesauri, Ontologies and Classifications (BARTOC). Die Datenbank wird von der Universitätsbibliothek Basel betrieben und beinhaltet Thesauri, Ontologien, Klassifikationen, Kontrollierte Vokabulare und Taxonomien. Sie sammelt Metadaten kontrollierter und strukturierter Vokabulare und stellt eine Suchoberfläche in 20 Sprachen zur Verfügung. Die Metadaten werden mit Nummern der Dewey Decimal Classification (DDC) bis hinunter zur dritten Ebene und Schlagwörtern aus dem Eurovoc-Thesaurus angereichert. BARTOC enthält momentan ca. 600 Datensätze in 65 Sprachen und soll weiter wachsen.

Doris Eh / 11. Dezember 2013 / Datenbanken, Was ist neu? / Klassifikation, Systematik, Thesaurus

BARTOC and coli-conc come face to face – International UDC Seminar 2015

2015: Initiation BARTOC & coli-conc Collaboration

KOS Registry

This list contains a collection of knowledge organization systems relevant to project coli-conc. It is a subset of all systems known to coli-conc. It is a subset of the full KOS Registry, the set of all systems known to the project (you can find the download to the latest release here). Please use Cocoda to select and browse within the systems!

Name	PICA	MARC
Klassifikation für Allgemeinbibliotheken (KAB)	`045B[03]$a`	`080{$2=kab}`
Systematik für Kinder- und Jugendbibliotheken (SKJ)		
Systematik der Stadtbibliothek Duisburg (SSD)	`045B[01]$a`	`080{$2=asb}`
Fachsystematik der Universitäts- und Landesbibliothek Düsseldorf (FULD)		
Classification for orthodox church and theology (Coct)		
Göttinger Online-Klassifikation (GOK)		`084{$2=GOK}`
Systematik für Evangelische Büchereien (SEB)		
Sachbuch-Systematik für Katholische öffentliche Büchereien (SKB)		
Konstanzer Systematik (KonSys)		
Fachklassifikation Digitale Bibliothek (FKDigBib)		
Systematik der Universitäts- und Landesbibliothek Bonn (SULB)		

Joint Papers and Presentations

By Voß, Jakob; Ledl, Andreas & Balakrishnan, U.:

- **Uniform description and access to Knowledge Organization Systems with BARTOC and JSKOS**

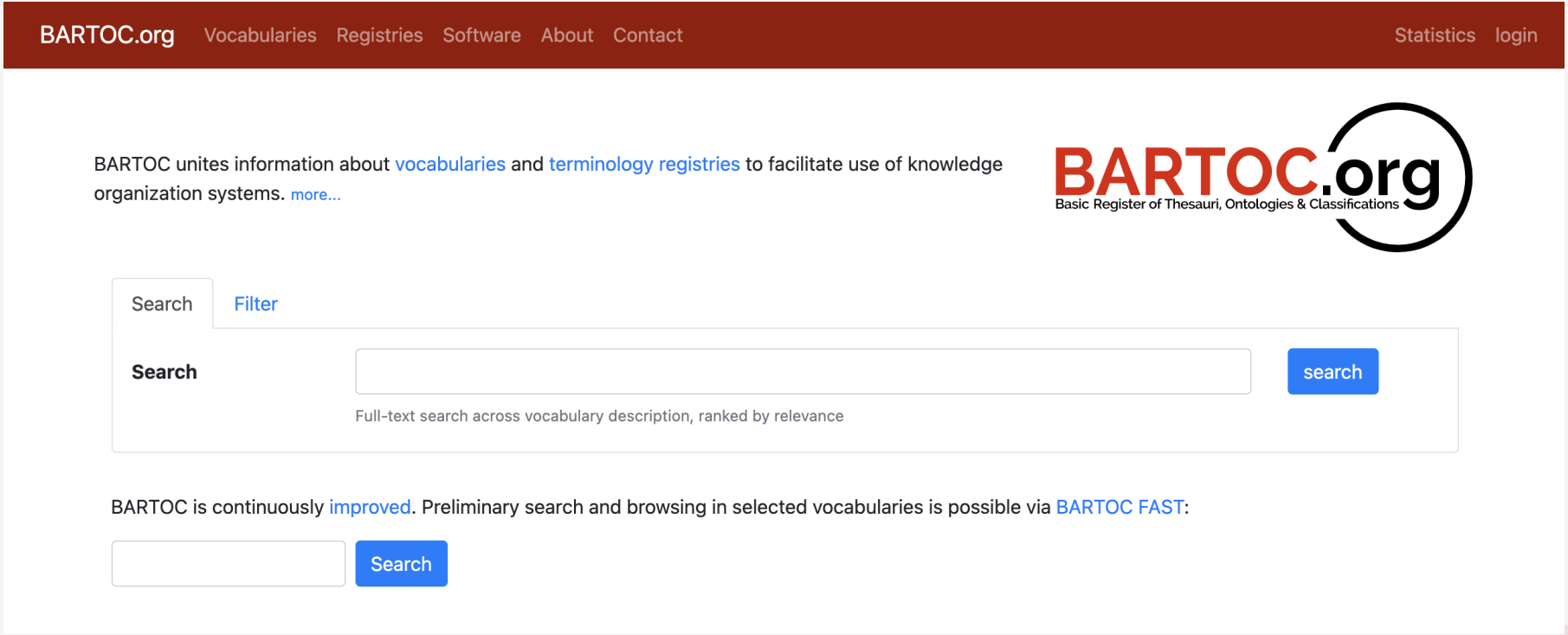
  In: Proceedings of TOTh conference 2016, https://doi.org/10.5281/zenodo.438019
- **Interoperability of KOS Metadata Schemas in BARTOC and JSKOS**

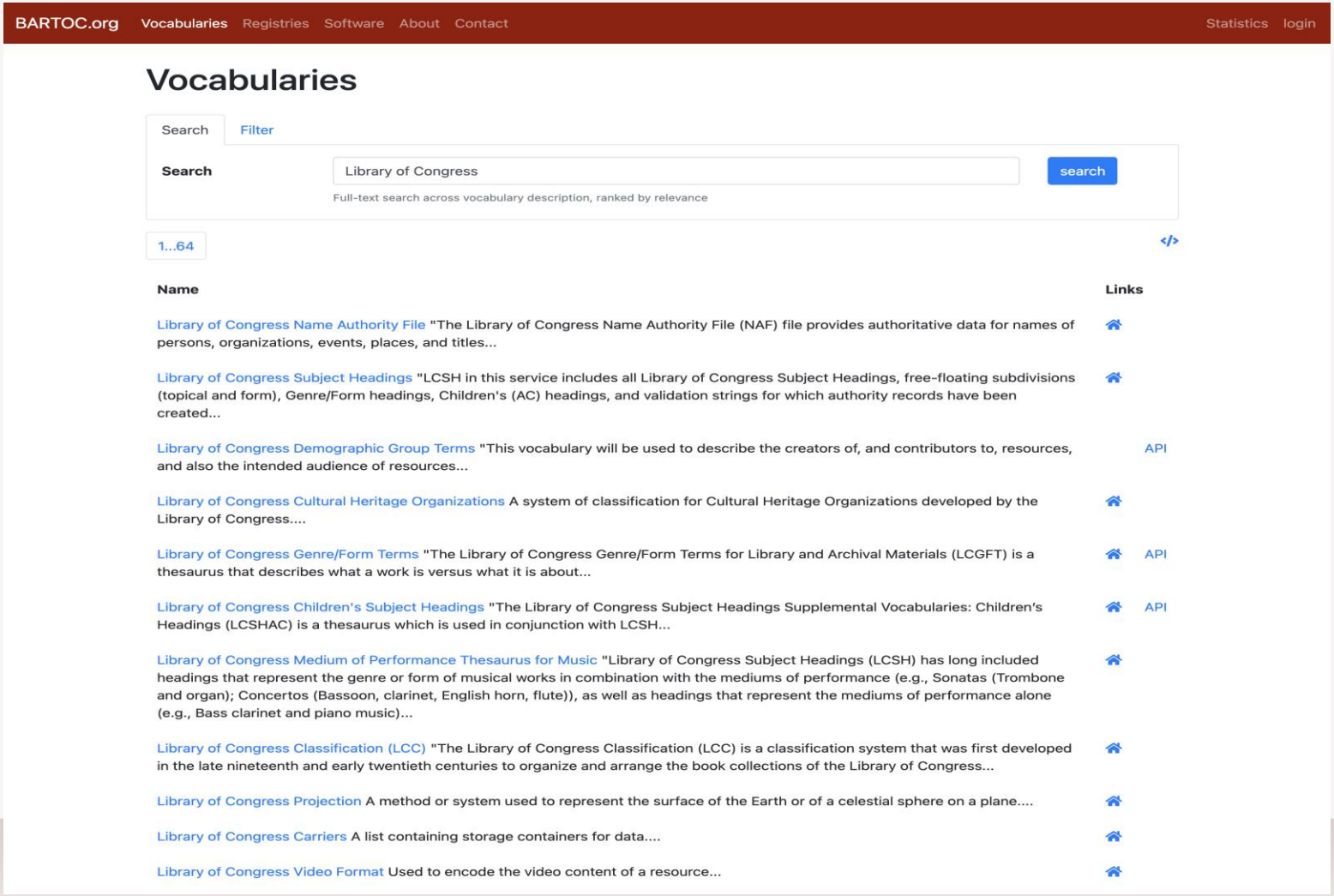
  Presentation at 16th European NKOS Workshop, October, 15th, 2016 in Copenhagen
- **Describing Knowledge Organization Systems in BARTOC and JSKOS**

  Presentation at TKE 2016, June 24th, 2016
- BARTOC und coli-conc: Internetarchäologie und Zukunftsforschung zum Verhältnis zweier Projekte, SI &IT Workshop, VZG 2017
- Unification of vocabulary services in BARTOC. 2021-03-23. Poster at Code4Lib 2021. https://doi.org/10.5281/zenodo.4629367

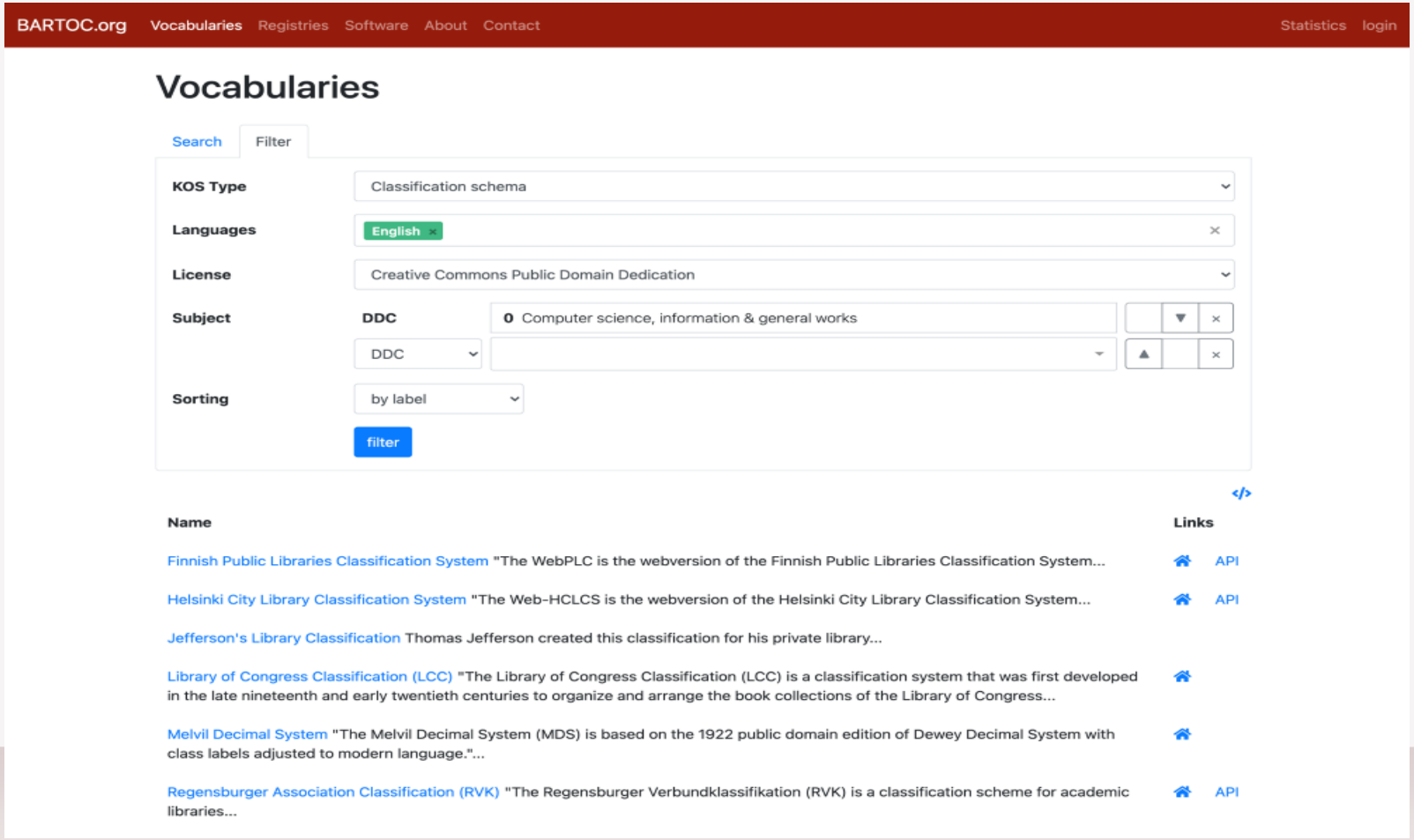
BARTOC Today – A field of Flowers

The Search Interface - Basic Search




BARTOC.org
Vocabularies
Registries
Software
About
Contact
Statistics
login
Vocabularies
Search
Filter
Search
Library of Congress
search
Full-text search across vocabulary description, ranked by relevance
1...64
Name
Links
Library of Congress Name Authority File "The Library of Congress Name Authority File (NAF) file provides authoritative data for names of persons, organizations, events, places, and titles...
Library of Congress Subject Headings "LCSH in this service includes all Library of Congress Subject Headings, free-floating subdivisions (topical and form), Genre/Form headings, Children's (AC) headings, and validation strings for which authority records have been created...
Library of Congress Demographic Group Terms "This vocabulary will be used to describe the creators of, and contributors to, resources, and also the intended audience of resources...
API
Library of Congress Cultural Heritage Organizations A system of classification for Cultural Heritage Organizations developed by the Library of Congress....
Library of Congress Genre/Form Terms "The Library of Congress Genre/Form Terms for Library and Archival Materials (LCGFT) is a thesaurus that describes what a work is versus what it is about...
API
Library of Congress Children's Subject Headings "The Library of Congress Subject Headings Supplemental Vocabularies: Children's Headings (LCSHAC) is a thesaurus which is used in conjunction with LCSH...
API
Library of Congress Medium of Performance Thesaurus for Music "Library of Congress Subject Headings (LCSH) has long included headings that represent the genre or form of musical works in combination with the mediums of performance (e.g., Sonatas (Trombone and organ); Concertos (Bassoon, clarinet, English horn, flute)), as well as headings that represent the mediums of performance alone (e.g., Bass clarinet and piano music)...
Library of Congress Classification (LCC) "The Library of Congress Classification (LCC) is a classification system that was first developed in the late nineteenth and early twentieth centuries to organize and arrange the book collections of the Library of Congress...
Library of Congress Projection A method or system used to represent the surface of the Earth or of a celestial sphere on a plane....
Library of Congress Carriers A list containing storage containers for data....
Library of Congress Video Format Used to encode the video content of a resource...

The Search Interface - Advanced Search



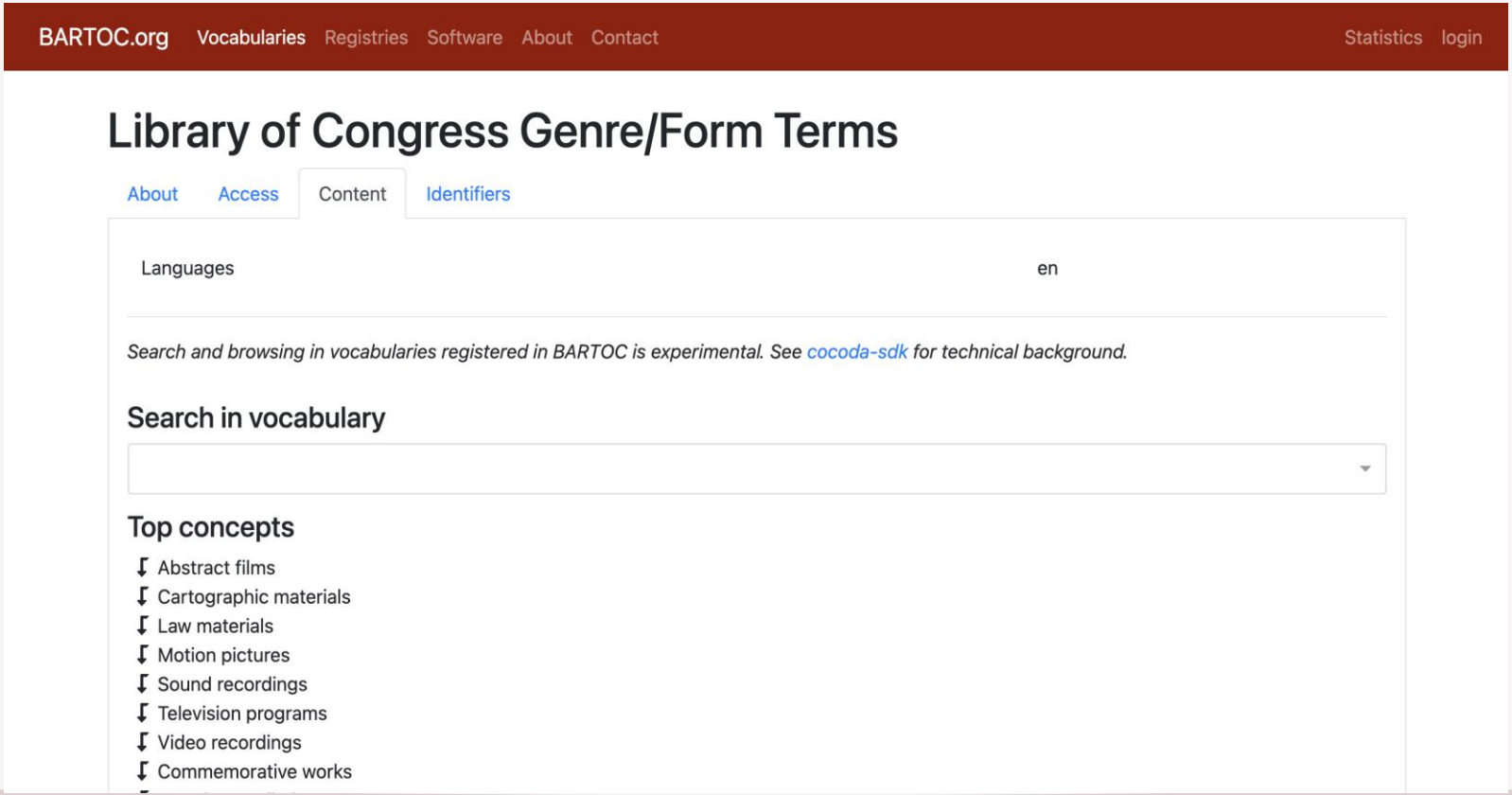
BARTOC FAST

- **Federated Search** of terms/concepts in different vocabularies from multiple resources
- **Currently accessess** 23 remote resources

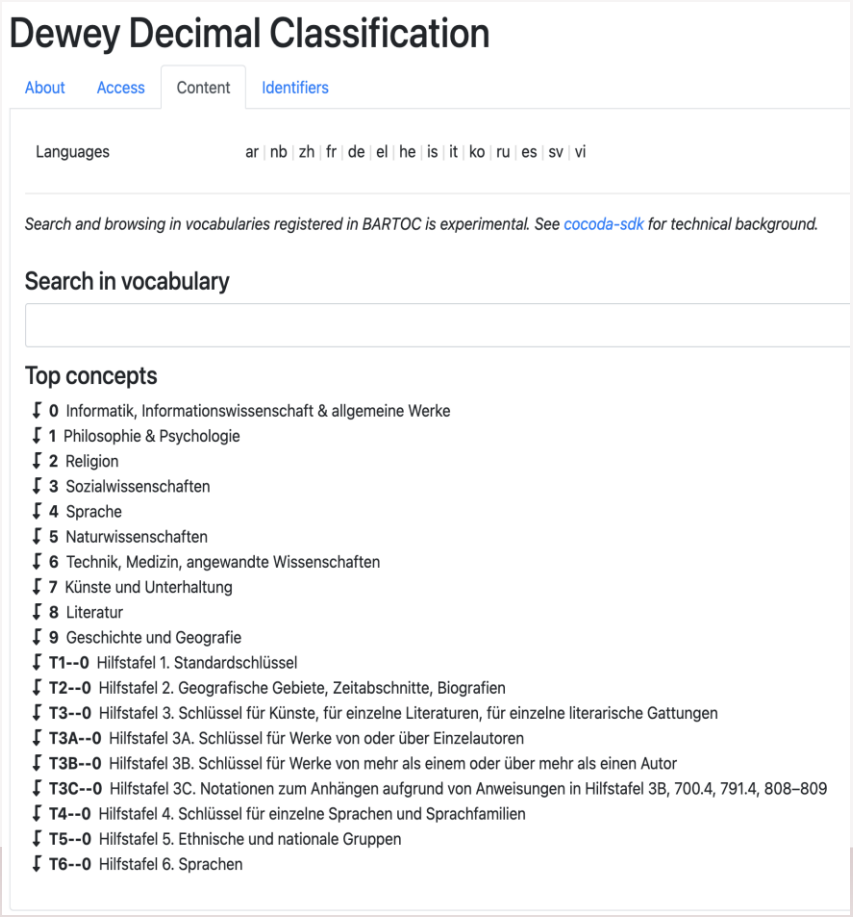
BARTOC - Relaunch

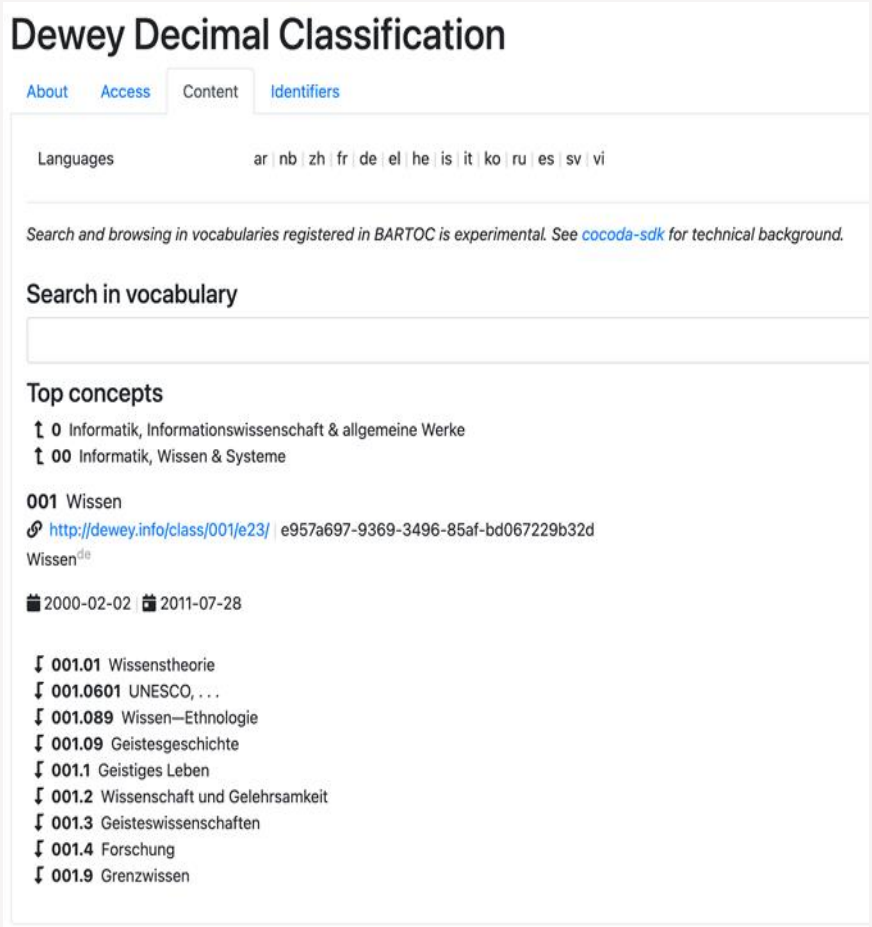
- Moved to and hosted by VZG, Göttingen since 2020
- Administered & maintained by the coli-conc team
- Renamed from *Basel Register…* to *Basic Register…*
- The database replaced by JSKOS Server
- Drupal CMS replaced by new web interface
- **Working on seamless integration into coli-conc preserving the name BARTOC**

New Features - Search and Browse in Vocabulary

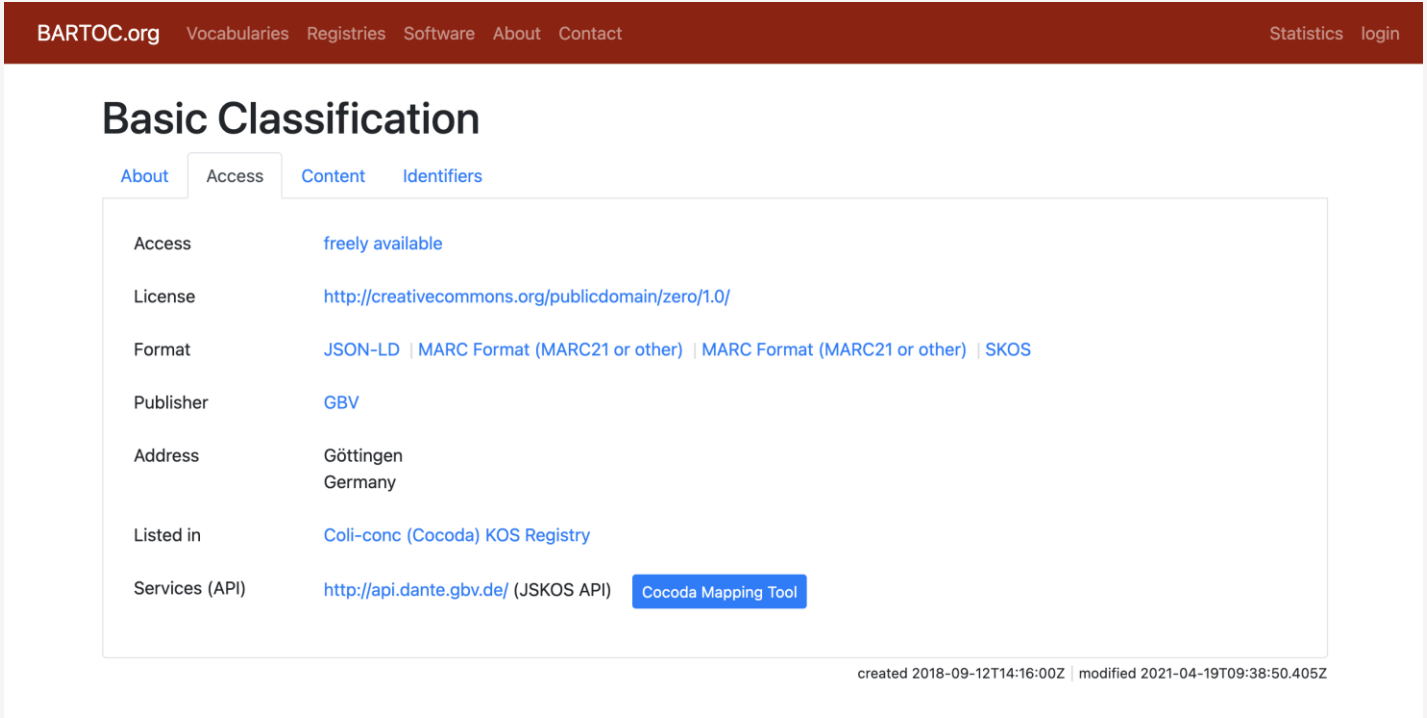


New Features - Search and Browse in Vocabulary

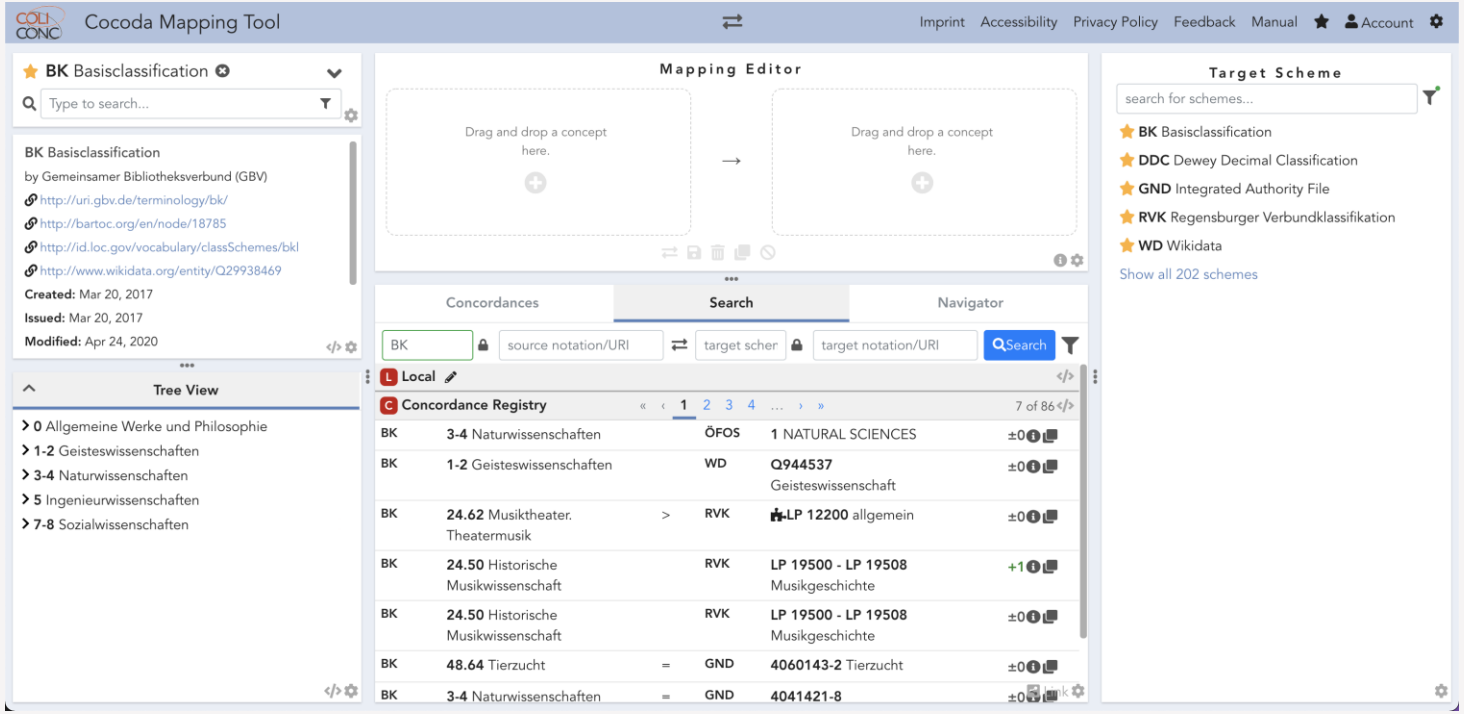



Dewey Decimal Classification
About
Access
Content
Identifiers
Languages
ar | nb | zh | fr | de | el | he | is | it | ko | ru | es | sv | vi
Search and browsing in vocabularies registered in BARTOC is experimental. See cocoda-sdk for technical background.
Search in vocabulary
Top concepts
0 Informatik, Informationswissenschaft & allgemeine Werke
00 Informatik, Wissen & Systeme
001 Wissen
http://dewey.info/class/001/e23/ | e957a697-9369-3496-85af-bd067229b32d
Wissen de
2000-02-02 | 2011-07-28
001.01 Wissenstheorie
001.0601 UNESCO, . . .
001.089 Wissen—Ethnologie
001.09 Geistesgeschichte
001.1 Geistiges Leben
001.2 Wissenschaft und Gelehrsamkeit
001.3 Geisteswissenschaften
001.4 Forschung
001.9 Grenzwissen

New Features enabled by integration: Direct access to Mapping Tool *Cocoda*



New Features enabled by integration: Direct access to Mapping Tool *Cocoda*



Editing in BARTOC

- Team of BARTOC Editors
- Screencast “Addition of vocabularies to BARTOC” https://doi.org/10.5446/51813

Contact

BARTOC content is curated by an international group of editors. Please contact one of your choice to contribute missing vocabularies or to supply corrections!

Austria

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Managing Director & CEO
Semantic Web Company GmbH / PoolParty

France

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R&D Engineer, Mondeca

Germany

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The Netherlands

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Switzerland

Dr. Andreas Ledl
University of Applied Sciences and Arts Northwestern Switzerland

United Kingdom

Suzanne Barbalet
UK Data Service, University of Essex

USA/North America

Heather Hedden
Data & Knowledge Engineer, Semantic Web Company

How to access Vocabularies via BARTOC?

- Information about vocabulary APIs in BARTOC (tab Access - Skosmos, JSKOS API, TemaTres…)
  - https://bartoc.org/en/node/18785#access
- JavaScript library *cocoda-sdk* to access vocabulary APIs (for unified access in JSKOS)
- Access via User Interface (tab Content)
  - https://bartoc.org/en/node/18785#content
  - *Can be used in other applications as well!*

BARTOC Tomorrow - A Garden

Future Plans

- **Facilitate** vocabulary searching/browsing for many KOS in different languages
- **Complete integration** with coli-conc infrastructure, including Cocoda
  - Provide information and links to existing mappings
  - Enable concordance building
- **Links to catalogs** that use vocabularies and **access to** title data
- **Develop a web interface** to upload, process, and manage vocabularies
- **Build a bigger and an active community** interested in Knowledge Organization Systems

Future Plans - Successor System for BARTOC FAST

- **Extend range of Vocabularies**
  - Federated Search in many vocabularies of multiple resources
  - Federated search of other KOS registries

Harmonization with other KOS registries

- Linked Open Vocabularies
- Taxonomy Warehouse
- Bioportal Biotechnology
- Ontobee
- …

Thank You!

Team coli-conc:

- Uma Balakrishnan (uma.balakrishnan@gbv.de)
- Jakob Voß (jakob.voss@gbv.de)
- Stefan Peters (stefan.peters@gbv.de)

To become a BARTOC partner, please contact us!