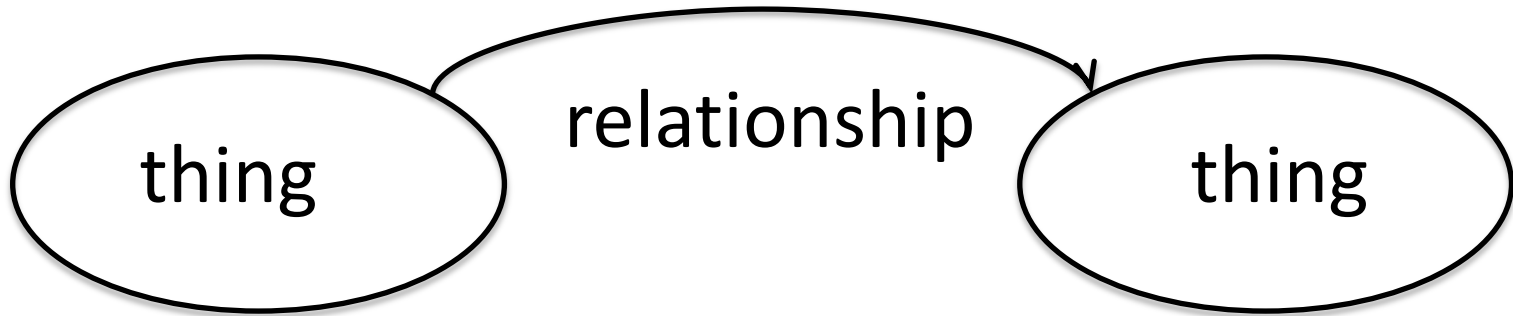




Vocabularies, linking, and application programming

TOOLS FOR LLD

Things



U R I

types of things

1. things we are describing/cataloging – either as subjects or objects
2. relationships (were: data elements)
3. controlled vocabularies

Library things

Work

Expression

Manifestation

Item

Person

Family

Corp

Object

Place

Concept

Event

~~Library~~ things

Work

Express

Man tion

Item

Person

Family

Corp

Object

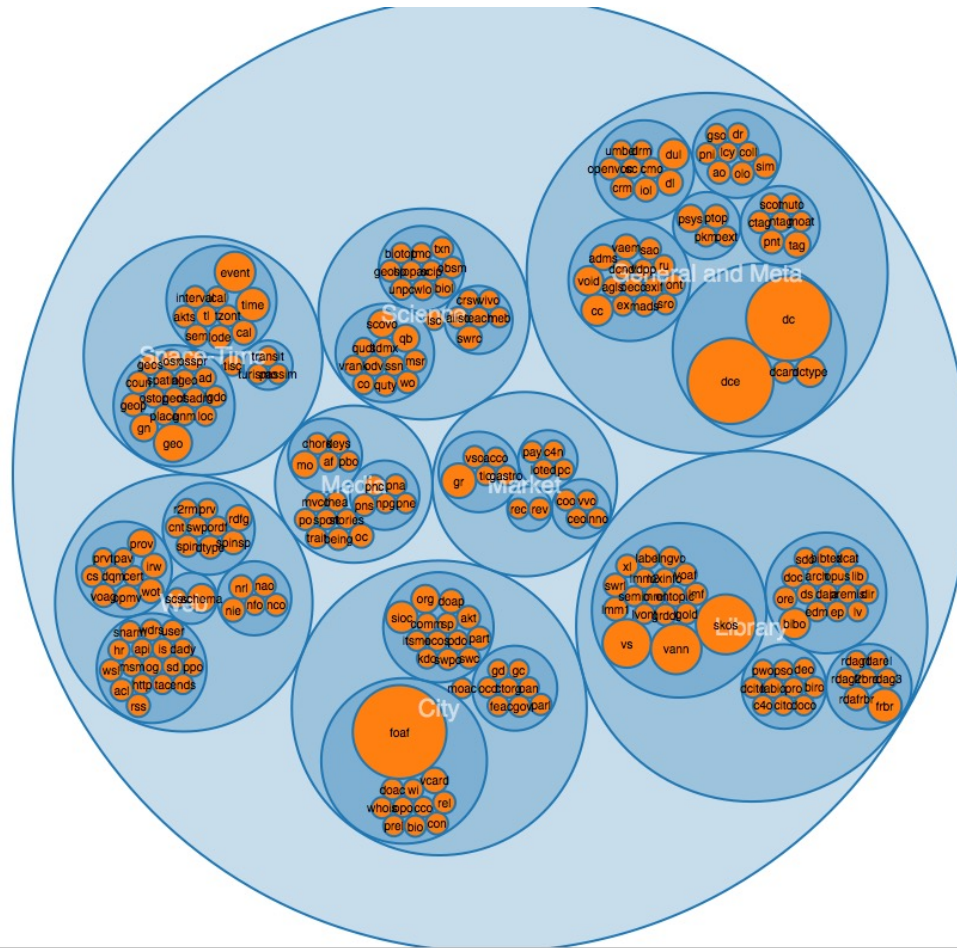
Place

Concept

Event

GENERAL TERMS AND VOCABULARIES

Linked Open Vocabularies



Swoogle

Want more results? [Login](#)



[ontology](#) [document](#) [term](#) [across ontologies](#)

Swoogle Search

Searching over 10,000 ontologies


[manual](#) o [news](#) o [faq](#) o [web-service](#) o [submit-url](#) o [sw-archive](#) o [feedback](#) o [swoogle2005](#)

Swoogle © 2004-2007, [ebiquity group](#) at UMBC

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<http://swoogle.umbc.edu/>

Swoogle

 **ontology** [document](#) [term](#) [across ontologies](#)

semantic web search [?](#) [F](#) [vers](#)

list ontologies matching ontology search 1 - 10 of total 41,981 results for title in 0.788 seconds

sort by | [date](#) | [triple](#) |

<http://purl.org/dc/elements/1.1>
[DEF] , relation, rights, source, subject, **title**, type
SemanticWebDocument, RDFXML, 2005-02-14, 15K, ontoRatio(0.92), [metadata](#), [cached](#)

<http://xmlns.com/foaf/0.1/index.rdf>
[DEF] , status, sum, surname, term, term_status, theme, thumbnail, tipjar, **title**, topic, topic_interest, weblog
SemanticWebDocument, RDFXML, 2010-08-08, 43K, ontoRatio(1.00), [metadata](#), [cached](#)

<http://purl.org/rss/1.0>
[DEF] channel, description, image, item, link, name, textinput, **title**, url
SemanticWebDocument (embedded), RDFXML, 2004-02-09, 8K, ontoRatio(0.91), [metadata](#), [cached](#)

<http://www.w3.org/2002/07/owl>
[DESC] title - The OWL 2 Schema vocabulary (OWL 2) | comment - This ontology partially describes the built
SemanticWebDocument, RDFXML, 2009-11-15, 31K, ontoRatio(1.00), [metadata](#), [cached](#)

IDENTIFYING COMMON THINGS

Identifying People

- Friend Of A Friend <http://www.foaf-project.org/>
 - “foaf-a-matic” <http://ldodds.com/foaf/foaf-a-matic/>
- Wikipedia – any person’s page URL
- Worldcat Identities
- New York Times <http://data.nytimes.com>
- MusicBrainz <http://musicbrainz.org>
- BBC
- Virtual International Authority File (<http://viaf.org>)

Identifying Places

- Geonames <http://geonames.org/>
- Wikipedia
- AGROVOC (FAO subject thesaurus)
 - <http://aims.fao.org/standards/agrovoc/about>
- LCSH <http://id.loc.gov/>
- BBC
- New York Times

Identifying Topics

- WikiSpecies
- BBC Wildlife Ontology
- National Agriculture Library Thesaurus
- AGROVOC (FAO)
- Various library subject thesauri (LC, Bnf, DNB, BNE, Japan)
- Many, many more

Finding bibliographic data

Biblios.net - the world's largest database of freely-licensed library records

443 views

[OPEN](#) [DATA](#)

About The beta test environment for LibLime's new cataloging service, [biblios.net](#), is now available! [biblios.net](#) is a subscription-based, hosted version of the open-source [biblios...](#)

British National Bibliography (BNB) - Linked Open Data

[api/sparql](#) [api/describe](#) [api/search](#) [api/search](#) [example/rdf+xml](#) [example/rdf+ttl](#)
[example/rdf+json](#) [example/html](#) [example](#) [xml](#) [html](#) [html](#) | [pdf](#) [application/x-](#)
[zip-compressed](#) [application/x-zip-compressed](#) [application/x-zip-compressed](#)
[application/x-zip-compressed](#) [application/x-zip-compressed](#) [application/x-](#)
[zip-compressed](#) [application/x-zip-compressed](#) [application/x-zip-compressed](#)
[application/x-zip-compressed](#)

1541 views

[OPEN](#) [DATA](#)

British National Bibliography (BNB) published as Linked Data by the British Library, linked to external sources including VIAF, LCSH, Lexvo, GeoNames, MARC country, and language,...

Current Contents Nutrition. Environment. Agriculture.

CC GREEN is a service provided by the ZB MED, the German [SISIS export format](#) [SISIS export format](#)
National Library of Medicine. Health. Nutrition. Environment.
Agriculture. CC GREEN includes metadata of about 200
scientific...

107 views

[OPEN](#) [DATA](#)

CC MED - Current Contents Medicine Database of German and German-Language Journals

The CC MED dataset comprises [SISIS export format](#) [SISIS export format](#) [SISIS export format](#)
article data from German and
German-language journals
obtained via scans of the Table of Contents. Article data in CC MED is generated from the tables of...

111 views

[OPEN](#) [DATA](#)

CERN Bibliographic Data

[marc/xml](#)

About Bibliographic metadata from CERN library. Announcement: <http://gs-service-bookdata.web.cern.ch/gs-service-bookdata/announcement.html> Openness The data is dual licensed under CC0...

245 views

[OPEN](#) [DATA](#)

thedatahub.org/group/bibliographic

“id.loc.gov”

The screenshot shows a web browser window with the following elements:

- Browser Tabs:** (LOV) Linked Open Vocabularies, Home - LC Linked Data Service ...
- Address Bar:** id.loc.gov
- Page Header:** LIBRARY OF CONGRESS logo, navigation buttons (ASK A LIBRARIAN, DIGITAL COLLECTIONS, LIBRARY CATALOGS), and a search bar (Search Loc.gov).
- Breadcrumbs:** The Library of Congress > Linked Data Service
- Main Content Area:**
 - Left Sidebar:** LIBRARY OF CONGRESS LINKED DATA SERVICE header, a photo of a library interior, and a list of links: [Linked Data Service](#), [About](#), [Dataset Descriptions](#), [Search](#), [Download](#), [Technical Center](#), and [Contact Us](#).
 - Center:** LC Linked Data Service Authorities and Vocabularies header, a decorative architectural frieze image, and a search section. The search section includes a text input field (Enter Keyword or Phrase), a dropdown menu (All, LC Subject Headings, LC Name Authority File, LC Classification, LC Children's Subject Headings), and Search/Reset buttons.
 - Right:** A note: "**Please Note: LC Classification entries are not included in general search results. You must explicitly select LC Classification in order to search the scheme. This is temporary while the impact of adding LCC to the current system is better understood."
- Footer:** Available Datasets section with introductory text.

programmers and application developers

DEVELOPMENT

Lists of tools

W3C Semantic Web tools

– <http://www.w3.org/2001/sw/wiki/Tools>

categories: APIs, converters, reasoners,
programming environments, browser tools, social
media, triple stores, validators, development
environments

Lists of tools

Sweet tools, by Mike Bergman

<http://www.mkbergman.com/sweet-tools>

categories: agents, annotators, APIs, ontology creators, browser tools, application frameworks, converters...



Tool Name	Category	Tool Name	Category
Caboto	Annotator	LODE	Ontology (general)
Callisto	Annotator	LSW	Ontology (general)
Clipmarks	Annotator	Mastro	Ontology (general)
COHSE	Annotator	mopy	Ontology (general)
D3E	Annotator	NKE	Ontology (general)
Dannotate	Annotator	OntoCAT	Ontology (general)
DBin	Annotator	OntoComp	Ontology (general)
DBpedia Spotlight	Annotator	Ontodella	Ontology (general)
DEVONthink	Annotator	Ontolingua	Ontology (general)
ED (Entity Describer)	Annotator	Ontology Metrics	Ontology (general)
Epiphany	Annotator	OntoSpec	Ontology (general)
eServices	Annotator	OntoVCS	Ontology (general)
Faviki	Annotator	OntoWeaver	Ontology (general)
Fistful of LOD	Annotator	OPML Support	Ontology (general)
GoNTogle	Annotator	ORE	Ontology (general)
GoodRelations Annotator	Annotator	OWL API	Ontology (general)
GroupMe!	Annotator	OWL Module Extractor	Ontology (general)
HyperBK	Annotator	OWL Verbalizer	Ontology (general)
ImageNotion	Annotator	OWLLib	Ontology (general)
Kraken	Annotator	OWLlink API	Ontology (general)
Loomp	Annotator	OLWTools	Ontology (general)
Melita	Annotator	Parrot	Ontology (general)
MindRaider	Annotator	Posh	Ontology (general)
MnM	Annotator	pOWL	Ontology (general)

Metadata development

The screenshot displays the Protégé ontology editor interface for the file `v1.rdf` (located at `http://www.loc.gov/standards/mads/rdf/v1.rdf`). The interface is divided into several panes:

- Active Ontology:** Contains tabs for `Entities`, `Classes`, `Object Properties`, `Data Properties`, `Individuals`, `OWLviz`, and `DL Query`.
- Class hierarchy (inferred):** Shows a tree view of classes. The `'Name Element'` class is selected and highlighted. Its subclasses include `'Genre/Form Element'`, `'Geographic Element'`, `'Language Element'`, `'Name Element'` (selected), `'Temporal Element'`, `'Title Element'`, and `'Tonic Element'`.
- Object property hierarchy:** Shows a single property `topObjectProperty`.
- Class Annotations:** Shows annotations for the selected `'Name Element'` class. A `label` annotation is visible with the value `"Name Element"@en`.
- Description:** Shows the description for the selected class. It includes `Equivalent classes`, `Superclasses` (listing `Element`), `Inherited anonymous classes` (listing `'Element Value' exactly 1 Literal`), `Members`, `Keys`, and `Disjoint classes`.

At the bottom of the interface, there is a status bar that reads: `No Reasoner set. Select a reasoner from the Reasoner menu` and a checked checkbox for `Show Inferences`.

Protégé

<http://protégé.stanford.edu>

(free)

Thesaurus development

The screenshot displays the PoolParty web interface. At the top, there is a search bar with the text "en" and a navigation menu with the following items: PROJECT, DOCUMENTS, TOOLS, OPTIONS, ADVANCED, HELP, and ABOUT POOLPARTY. The main content area is divided into two panels. The left panel shows a hierarchical tree structure of concepts under the heading "SWC punkt. Thesaurus". The tree is expanded to show "2.3 Partners (2)", which includes "Industry partner (18)". Under "Industry partner", there is a list of companies with their respective counts in parentheses: Atlassian (0), Digital Trowel (0), E-Smart Systems (0), Hanival (0), Intrafind Software AG (0), KDZ (0), Logica (0), Neurovation GmbH (0), Openlink Software (0), Oscar Bronner Online AG (1), ParsGroup (0), Software AG (0), and Springer (0). The right panel shows the "Selected Concept" view for "4.1.2 Semantic web products". It includes a unique identifier (urn:uuid:1D75E961-46DC-0001-1AAA-E59019A05000) and several tabs: SKOS, Metadata, Linked Data, Triples, Visualization, and Geo. The "SKOS" tab is active, showing "Broader Concepts" (4.1 Software products), "Narrower Concepts" (a list of related concepts like Ontologie editor, Quadstore, Semantic search engine, Semantic web platform, Semantic wiki engine, Thesaurus management system, and Triplestore), "Related Concepts", and "Exact Matching Concepts".

<http://poolparty.biz>

educational licensing

Programming

Apache Jena

<http://jena.apache.org>

“Java framework for building Semantic Web applications.”

- Tutorial!
- Getting started help!
- Documentation!

Programming

Pellet

<http://clarkparsia.com/pellet/>

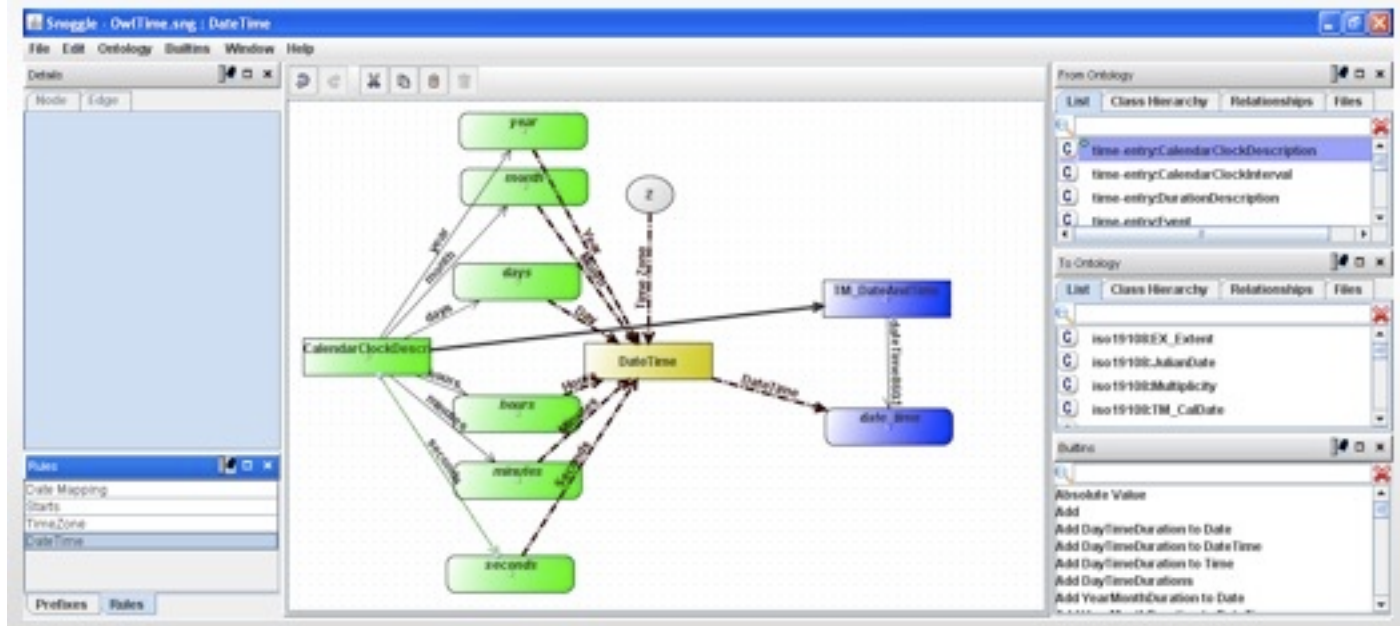
“OWL2 Reasoner for Java”

- Users group listserv.
- Examples in download.
- Commercial support available.

Programming

Snoggle

“a graphical, SWRL-based ontology mapper to assist in the task of OWL ontology alignment”



Programming

Virtuoso **SPARQL** query editor

<http://virtuoso.openlinksw.com>

SPARQL by Example

<http://www.cambridgesemantics.com/2008/09/sparql-by-example-tutorial!>

Thank you!

... AND THAT'S JUST A TASTE

[http://kcoyle.net/presentations/
inks.html](http://kcoyle.net/presentations/inks.html)

kcoyle@kcoyle.net