

Terminology Services

Experimental Services for Controlled Vocabularies

OCLC Research
April 2008

- Features
- Vocabularies
- Indexes and Indexing
- Sample Requests & Responses
- SRU examples
- Next Steps

Experimental Web Services for Controlled Vocabularies



Features

- Search descriptions of controlled vocabularies
- Search for concepts/headings in a controlled vocabulary
- Retrieve a single concept/heading record by its identifier
- Retrieve concepts/headings in multiple representations including HTML, MARC XML, Zthes, and SKOS
- Search using SRU CQL syntax

Vocabularies

Name	Description	Code
FAST subject headings	A controlled vocabulary based on the terminology of LCSH	fast
GSAFD ¹ Form and genre terms	Form and genre headings for fiction and drama	gsafd
Library of Congress AC Subject Headings	Headings for juvenile literature created for the Annotated Card (AC) program	lcshac
Library of Congress Subject Headings	A general subject heading vocabulary maintained by the U.S. Library of Congress	lcsch
Medical Subject Headings (MeSH®)	A controlled vocabulary for biomedical and health-related information produced by the U.S. National Library of Medicine	mesh
Thesaurus for graphic materials: TGM I	Subject terms for graphic materials by the Prints & Photographs Division, Library of Congress	lctgm
Thesaurus for graphic materials: TGM II	Genre headings and terms for physical characteristics for graphic materials by the Prints & Photographs Division, Library of Congress	gmgpc

Format Comparison

Vocabulary Element	Code	Z39.19	MARC21 Authorities	SKOS	Zthes Profile
Preferred term/Descriptor	PT	X	X	X	X
Preferred term/Linguistic equivalent	PT (LE)			X	X
Non-Preferred term	NPT (X)	X	X	X	X
Non-Preferred term (earlier form)	NPT (E)		X		
Non-Preferred term (acronym)	NPT (A)		X		
Broader term	BT	X	X	X	X
Broader term (generic)	BTG	X			
Broader term (instance)	BTI	X			
Broader term (partitive)	BTP	X			
Node label	NL	X	X	1	X
Narrower term	NT	X	X	X	X
Narrower term (generic)	NTG	X			
Narrower term (instance)	NTI	X			
Narrower term (partitive)	NTP	X			
Related term	RT	X	X	X	X
Note--Scope note	SN	X	X	X	X
Note--History note	HN	X	X	X	X
Mapped term	MT		X	2	
Mapped term (broad match)	MT (B)			2	
Mapped term (narrow match)	MT (N)			2	
Classification/Category number	CN		X	3	

Format Comparison -- Notes



Label	MARC21	SKOS	Zthes
PT	1XX and 008/09=a,d,f	skos:prefLabel	termType=PT and termName
PT(LE)		skos:prefLabel and xml:lang	relationType=LE and termName
NPT	4XX	skos:altLabel	relationType=UF and termName
NPT(E)	4XX\$w/0=a	sub-property skos:altLabel	relationType=X-NPT(E) and termName
NPT(A)	4XX\$w/0=d	sub-property skos:altLabel	relationType=X-NPT(A) and termName
BT	5XX\$w=g and 5XX\$0	skos:broader	relationType=BT and termId
BTG		sub-property skos:broader	relationType=X-BTG and termId
BTI		sub-property skos:broader	relationType=X-BTI and termId
BTP		sub-property skos:broader	relationType=X-BTP and termId
NL	1XX and 008/09=e	[proposed]	termType=NL and termName
NT	5XX\$w=g and 5XX\$0	skos:narrower	relationType=NT and termId
NTG		sub-property skos:narrower	relationType=X-NTG and termId
NTI		sub-property skos:narrower	relationType=X-NTI and termId
NTP		sub-property skos:narrower	relationType=X-NTP and termId
RT	5XX\$w≠g,h and 5XX\$0	skos:related	relationType=RT and termId
SN	680	skos:scopeNote	termNote
HN	688	sub-property skos:note	termNote label=HN
MT	7XX and 7XX\$0	smap:exactMatch	relationType=X-MT and sourceDb and termId
MT(B)		smap:broadMatch	relationType=X-MTB and sourceDb and termId
MT(N)		smap:narrowMatch	relationType=X-MTN and sourceDb and termId
CN	052,053,065,072,083,087	dct:subject	relationType=X-CN and termId

1. The SKOS standard will eventually have a mechanism to distinguish node labels from concept labels.
 2. Representation of mapped terms requires the use of the SKOS mapping standard which may eventually be built into base SKOS standard.
 3. Representation of classification and category numbers requires the use of the Dublin Core standard.
- Of note are the extension mechanisms: Z39.19 non-specified; MARC21-A fields XX9, X9X, 9XX and subfield-9; Zthes termType and relationType; SKOS RDF extensible by extending the schema by creating new sub-classes or sub-properties of the base class or property.

Indexes and Indexing

Index Name	Description	Type
identifier	An unambiguous reference to a concept/heading in a controlled vocabulary	string
alternativeTerms	Entry terms, also known as lead-in terms or variant terms, for a concept/heading	word
expandedHeading	All word(s) in a complete heading	string
facets	Facets associated with a concept/heading	word
mappedIdentifier	Identifier for a mapped concept/heading	string
mappedTerms	Word(s) in a mapped concept/heading	word
marcTags	MARC tags in a concept/heading record	word
notes	Words in a note	word
preferredTerm	Word(s) in a preferred term/authorized heading	word
rootHeading	All word(s) in a main heading	string
terms	Word(s) in a preferred term and variant term(s)	word
vocabularyId	A code assigned to a controlled vocabulary	string

Sample Requests and Responses



<http://tspilot.oclc.org/> (service document)

<http://tspilot.oclc.org/gsafd/?version=1.1&operation=explain>
(SRU interface)

<http://tspilot.oclc.org/gsafd/GSAFD000029>

<http://tspilot.oclc.org/gsafd/GSAFD000029.marcxml>

<http://tspilot.oclc.org/gsafd/GSAFD000029.skos>

<http://tspilot.oclc.org/gsafd/GSAFD000029.zthes>

1. Search preferred term index for science fiction, results are returned using server defaults

<http://tspilot.oclc.org/gsafd/?query=oclccts.preferredTerm+%3D+%22science+fiction%22&version=1.1&operation=searchRetrieve>
[e](#)

2. Search alternative terms for whodunits or thrillers results are returned using server defaults

<http://tspilot.oclc.org/gsafd/?query=oclccts.alternativeTerms+%3D+%22whodunits%22+or+oclccts.alternativeTerms+%3D+%22thrillers%22&version=1.1&operation=searchRetrieve>

- Conduct a pilot with selected institutions/projects
 - RLG Program partners
 - HILT project
 - NKOS participants
- Add to OCLC Developers' Network

Web site

- <http://tspilot.oclc.org/resources/>

Project team

- Andrew Houghton
- Roger Thompson
- Diane Vizine-Goetz