COAR Vocabularies

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About the Interest Group

- Provides a forum for repository managers and information specialists
- Gathers information on controlled vocabularies and their usage in appl. profiles
- Took over “info:eu-repo” application profile
  - European standardization effort to harmonize usage of OAI metadata; supported via plugins in OJS, DSpace, EPrints
- Has set up Editorial Board for COAR Controlled Vocabularies
Problem Definition

Factors

- Variety of metadata standards and vocabularies
- Regional repository networks, diversity of spoken languages
- Update of repository technology stack
  - linked data, semantic web
- Contextual description of digital objects
  - publ.-data-linkage, classification, embargo dates, ...

⇒ Improvement of syntactic & semantic interoperability
Quality Assurance and Sustainability

- COAR Controlled Vocabularies are build on reviewed “info:eu-repo” encoding schemes
- Editorial Board members take care of
  - suggested new concepts / terms
  - language translation of labels
  - documentation
- Workflow driven editorial online tool
  - VocBench (originally created to manage AGROVOC)
- COAR Controlled Vocabularies are going to be operated as COAR Service for Open Access Repositories
Vocabulary Editing and Workflow Tool

Concept

Multilingual Labels

Mappings
Technical Implementation

- resolves legacy purl.org/info:eu-repo/semantics/ URIs
- resolves purl.org/coar/ URIs

<table>
<thead>
<tr>
<th>FAO</th>
<th>SKOS-Files</th>
<th>export</th>
<th>publish</th>
<th>upload</th>
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Diagram:

- purl.org request to Web-Browser / RDF Client
- purl.org redirects to SPARQL-Endpoint
- SPARQL-Endpoint query to Pubby
- Pubby to OpenAIRE or UNIBI or ???
Using Pubby as Linked Data Frontend (demonstrator)

Concept “working paper”

C_8042 at COAR
http://openaire.uni-bielefeld.de:8480/pubby/resource_type/c_8042

skos:altLabel
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_375d>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_667>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_a0b>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_b03d>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_c0d9>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_f026436c6>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_f2ad31372>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_f671ca2d0>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_fcadbad49>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_f446d0c8>

skos:broadMatch
- <http://purl.org/dc/elements/1.1/Text>

skos:definition
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/def_d2db>

skos:exactMatch
- <http://ngintra.eu/og/vngintra/c_1400818042851>
- <http://purl.org/infocode/uni/semantics/workingPaper>
- <http://www.eurocris.org/ontologies/senarif/1.3#WorkingPaper>

skos:inScheme
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type>

dct:modified
- 2015-06-03T21:58:05Z (xsd:dateTime)

skos:prefLabel
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_16f4>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_b03d>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_c219166d>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_f75404f6f8>
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xt_fbdce0f63>

skos:topConceptOf
- <http://openaire.uni-bielefeld.de:8480/pubby/resource_type>

rdfs:label
- skos:Concept

Concept Definition

def_d2db at COAR Vocabularies
http://openaire.uni-bielefeld.de:8480/pubby/resource_type/def_d2db

Property
- Value
  - is definition of
    - <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/c_8042>
  - value
    - An unpublished paper, usually circulated privately among a small group of peers, to provide information or with a request for comments or editorial improvement. (en)

English Label

xl_16f4 at COAR Vocabularies
http://openaire.uni-bielefeld.de:8480/pubby/resource_type/xl_16f4

Property
- Value
  - is literalForm
    - working paper (en)
  - is prefLabel of
    - <http://openaire.uni-bielefeld.de:8480/pubby/resource_type/c_8042>
  - type
    - <http://www.w3.org/2000/01/rdf-schema#Label>
Features

- definition of a set of concepts
- concepts assigned persistent identifiers
- labelled in various languages, starting with
  - english, french, spanish, chinese, russian, italian, …
- URL based relations to other concepts/terms in similar vocabularies (mapping)
- support of hierarchical structure of concepts

<table>
<thead>
<tr>
<th>1st level concept</th>
<th>2nd level concept</th>
<th>3rd level concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>image</td>
<td></td>
<td></td>
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<tr>
<td>image</td>
<td>still image</td>
<td></td>
</tr>
<tr>
<td>image</td>
<td>moving image</td>
<td></td>
</tr>
<tr>
<td>image</td>
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<td>video</td>
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COAR Vocabularies and Dictionaries

- **resource types**
  - describing the genre of a research resource
    - almost stable for first public release
- **access mode**
  - describing the mode of ‘openness’ of a resource
    - pending
- **version**
  - expressing a specific version of a resource
    - pending
- **date type**
  - describing an event in the lifecycle of a resource
    - pending
- **dictionary on classification schemes**
Usage Scenarios in Institutional Repositories

- Repository User Interface
  - multilingual labels in controlled lists, e.g. publication type
- Making controlled values consistent across platforms in OAI metadata, thereby
  - reduce normalization efforts for aggregators
  - meet regional and funder guidelines on OA metadata
- publish linked open data using concept URIs of shared controlled vocabularies
Let’s Start Discussion

**Our aim:**
- create / maintain internationally recognized vocabularies for OA repositories

**Requires:**
- widespread uptake in the repository community

**By ideally:**
- support in repository software implementation
More Information

• About the COAR Interest Group on Controlled Vocabularies
  • [http://purl.org/coar/igcv](http://purl.org/coar/igcv)

• Get in contact
  • with the group leader:
    [jochen.schirrwagen@uni-bielefeld.de](mailto:jochen.schirrwagen@uni-bielefeld.de)
  • with the COAR office:
    [office@coar-repositories.org](mailto:office@coar-repositories.org)