COAR Resource Type Controlled Vocabulary: Dspace Prototype implementation

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Session Type
• Poster

Abstract
Open access repositories are evolving in terms of the roles they play and the attributes they aim to express in their records. The use of controlled vocabularies in bibliographic metadata is essential to ensure interoperability in terms of data exchange and the provision of value added services. The Resource Type vocabulary defines concepts to identify the genre of a resource. Such resources, like publications, research data, audio and video objects, are typically deposited in institutional and thematic repositories or published in ejournals. Using the example of the COAR Resource Type vocabulary to describe the genre of a digital object organizational, methodological and technical steps of its implementation are presented using the integration process in DSpace. There two main ways to develop an implementation of the COAR resource types Controlled Vocabularies in DSpace: Controlled vocabulary and Dropdown (list).

Conference Themes
• Supporting Open Scholarship, Open Data, and Open Science

Keywords
Repositories, COAR, Open Access, Resource types.

Audience
Repository managers and administrators, Librarians, data source providers.

Background
Open access repositories are evolving in terms of the roles they play and the attributes they aim to express in their records. Users want to know about additional metadata elements used for describing repository items. Given the truly international and collaborative nature of research, repositories must be connected and aligned around policy and practices, and standard controlled vocabularies are an extremely important aspect of this alignment. Through an active, international Editorial Board, COAR has begun to develop a series of controlled vocabularies for open access repositories.

Poster content
The use of controlled vocabularies in bibliographic metadata is essential to ensure interoperability in terms of data exchange and the provision of value added services. Repositories are using controlled vocabularies (e.g. from the Dublin Core Metadata Initiative) and application profiles (e.g. info:eu-repo) across system boundaries.
The COAR Interest Group on “Controlled Vocabularies” aims to address this problem and is developing a set of controlled vocabularies for open access repositories as a community-driven effort. The Controlled Vocabulary for Repository Assets Interest Group is working to develop a set of controlled vocabularies and open access indicators that can be used by the international community.

The Resource Type vocabulary defines concepts to identify the genre of a resource. Such resources, like publications, research data, audio and video objects, are typically deposited in institutional and thematic repositories or published in ejournals. This vocabulary supports a hierarchical model that relates narrower and broader concepts. Multilingual labels regard regional distinctions in language and term. Concepts of this vocabulary are mapped with terms and concepts of similar vocabularies and dictionaries.

The Resource Type vocabulary is part of the COAR Controlled Vocabularies. The COAR Interest Group on “Controlled Vocabularies” is developing a set of controlled vocabularies for open access repositories as a community-driven effort. Using the example of the COAR Resource Type vocabulary to describe the genre of a digital object organizational, methodological and technical steps of its implementation are presented using the integration process in DSpace.

### Controlled Vocabularies in DSpace

DSpace supports controlled vocabularies – search and submission process.

- Supported controlled vocabularies are expressed in a simple XML format (“DSpace node schema”).
- All information about a term is enclosed in a `<node>` element.
- Only the expression of a hierarchical relationship is allowed through the use of the `<isComposedBy>` subelement.
- By using `<hasNote>` a simple annotation mechanism becomes possible.

### DSpace – Input forms

**Controlled vocabulary**

- Vocabulary = coar_types

```xml
<field>
  <dc-schema>dc</dc-schema>
  <dc-element>type</dc-element>
  <dc-qualifier>coar_types</dc-qualifier>
  <repeatable>false</repeatable>
  <label>Type</label>
  <input-type>textfield</input-type>
  <hint>Required</hint>
  <vocabulary>coar_types</vocabulary>
</field>
```

**Dropdown (list)**

```xml
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  <dc-qualifier>coar_types</dc-qualifier>
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Conclusion

The Resource Type vocabulary defines concepts to identify the genre of a resource. Such resources, like publications, research data, audio and video objects, are typically deposited in institutional and thematic repositories or published in ejournals. This vocabulary supports a hierarchical model that relates narrower and broader concepts. Multilingual labels regard regional distinctions in language and term. Concepts of this vocabulary are mapped with terms and concepts of similar vocabularies and dictionaries. There are two main methods to develop an implementation of the COAR resource types Controlled Vocabularies in DSpace: Controlled vocabulary and Dropdown (list).

References

https://www.coar-repositories.org/activities/repository-interoperability/ig-controlled-vocabularies-for-repository-assets/coar-vocabularies/