

## **Module: An introduction to metadata in DSpace**

### ***Module overview:***

This module will introduce the concept of metadata, and why it is used. Following that, the metadata support in DSpace will be explained along with how metadata is encoded and stored.

The metadata registry which holds the metadata will be shown, and the out-of-the-box metadata schema will be examined. Finally the module will show how to add a new metadata schema, along with a practical exercise to add a new term to the Dublin core schema included with DSpace.

### ***Module objectives:***

By the end of this module you will:

1. Understand the purpose of metadata
2. Know how DSpace encodes and stores metadata
3. Know how the metadata registry works, and how to edit a metadata schema
4. Have added a new term to an existing metadata schema



## What's metadata?



### What's metadata?

- **From Wikipedia:**
  - Metadata is "data about data", of any sort in any media. An item of metadata may describe an individual datum, or content item, or a collection of data including multiple content items.
  - Metadata (sometimes written 'meta data') are used to facilitate the understanding, characteristics, and management usage of data. The metadata required for effective data management varies with the type of data and context of use. In a library, where the data are the content of the titles stocked, metadata about a title would typically include a description of the content, the author, the publication date and the physical location.
  - In the context of a camera, where the data are the photographic image, metadata would typically include the date the photograph was taken and details of the camera settings (lens, focal length, aperture, shutter timing, white balance, etc.). On a portable music player such as an iPod, the album names, song titles and album art embedded in the music files are used to generate the artist and song listings, and are considered the metadata.
  - In the context of an information system, where the data are the content of the computer files, metadata about an individual data item would typically include the name of the field and its length. Metadata about a collection of data items, a computer file, might typically include the name of the file, the type of file and the name of the data administrator.
- <http://en.wikipedia.org/wiki/Metadata>



## What is metadata

Metadata is used to describe things. In DSpace metadata is used to describe the items that it holds. Metadata can apply at different levels:

- Communities have metadata describing them
- Collections have metadata describing them
- Items have metadata describing them
- Bitstreams have metadata describing them



## Types of metadata



### Types of metadata

- There are two broad types of metadata

1. Descriptive metadata

The title is "A brief history of time"



2. Administrative metadata

The item was deposited on 28<sup>th</sup> May 2008 at 20:25



## Types of metadata

Metadata can be split into two types:

1. Descriptive metadata

- Descriptive metadata describes attributes of an object, such as its name, its creator, or its size.

2. Administrative data

- Administrative metadata helps with the administration of an object. Examples include the location of the object or the name of the user who created the metadata about the object.



## Encoding metadata



### Encoding metadata

- Metadata is encoded using *metadata schemas*
- DSpace uses Dublin Core by default
  - Schema = 'dc'
  - Qualified Dublin Core
  - Elements
    - E.g. Title / Creator / Subject / Description
  - Qualifiers
    - E.g. Title.main / Title.subtitle / Title.series
  - E.g. dc.identifier.citation



## Dublin Core

DSpace is installed and configured to use the Dublin Core metadata schema by default. Dublin core is made up of elements, and qualifiers. There are 15 base elements:

- |                |                |
|----------------|----------------|
| 1. Title       | 9. Format      |
| 2. Creator     | 10. Identifier |
| 3. Subject     | 11. Source     |
| 4. Description | 12. Language   |
| 5. Publisher   | 13. Relation   |
| 6. Contributor | 14. Coverage   |
| 7. Date        | 15. Rights     |
| 8. Type        |                |

The elements can be refined through the use of qualifiers.



## The metadata registry



### The metadata registry

- Multiple schemas can be held in the metadata registry
  - Access via Administer menu -> Metadata Registry

#### Metadata Schema Registry

ID	Namespace	Name
1	<a href="http://dublincore.org/documents/dcmi-terms/">http://dublincore.org/documents/dcmi-terms/</a>	dc

Create a new schema by entering a namespace/name or edit an existing one by clicking the update button. The schema name must be less than 32 characters and cannot include spaces, periods or underscores.

Namespace:

Name:



## The metadata registry

The metadata registry is accessed via the 'Administrate' menu, by selecting the 'Metadata Registry' link. By default Dublin Core (dc) is included. New schemas can be added from the main registry screen.



## Editing a metadata schema



### Editing a schema

- Elements can be updated, removed or added:

64	title		Title statement/title proper.	Update	Delete...
143	type	qualificationlevel	Type Qualification Level Field	Update	Delete...
144	type	qualificationname	Type Qualification Name Field	Update	Delete...
66	type		Nature or genre of content.	Update	Delete...

#### Add Metadata Field

To create a new field you must provide a unique element and qualifier pair. The qualifier may be left blank if desired and the element and qualifier cannot contain spaces, underscores or periods.

Element:

Qualifier:

Scope Note:



## Editing a metadata schema

A schema can be edited as follows:

- Current elements can be edited and submitted using the 'Update' button
- Elements can be deleted by using the 'Delete' button next to an element
- New elements can be added using the 'Add Metadata Field' section at the bottom of the page. The qualifier is optional.



## ***Credits***

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