

DSpace: Administration

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How a digital repository is organized in DSpace

- Bitstreams (files having content)
- Bundles (more than one bitstream)
- Items (digital documents)
- Collections (a set of items)
- Sub-communities (a set of collections)
- Communities (Top level)

Items & Bitstreams

- The Basic digital document is called an item
- A bundle may consist of many files (bitstreams in DSpace parlance)
- Item is can have one bitstream or a bundle of bitstreams
- Item requires metadata description, just as printed document
- Bitstreams do not have metadata

Bitstream formats

- Text
 - plain text, html pages, Pdf, word, ps, TeX
- Images
 - Giff, jpeg, tiff etc
- Audio
 - Wav, mp3, real audio, midi
- Video
 - Mpeg, avi, mov etc

In fact...

- Bitstreams can be any computer file
- NOTE: If the end user system has the software to run a bitstream or his browser has a plug in, one can view or play bitstreams
- DSpace is blissfully unaware of file formats, it just stores and disseminates them



- Use open standards to ensure long term preservation
- Think of the format which you can support in the future (migration across versions of the software)
- Avoid proprietary standards



- Bitstream(s)
- Metadata
- License
- Plain text or thumbnail of the bitstreams in case you use filtermedia (which does full-text indexing or creates thumbnails to images)

Items

- Items are also referred as
 - Digital document
 - Digital resource
 - Digital object

Collection

- Items can be placed in a collection
- Example:
 - A collection of theses
 - A collection of reports
 - A collection of How-tos
 - A collection of e-mails



- Collections are part of a community or sub-community
- Communities can be divided into sub-communities, which can be further sub-divided



Examples of Communities

- Social Sciences
- Natural Sciences
- Humanities

Can be anything intuitive to the end user of your repository

Sub-Communities

- Under Humanities one can have sub-communities as
- Humanities
 - History
 - Philosophy
 - Psychology

Further division?

- Sub-communities can be divided into further sub-communities, such as
 - Philosophy (can have)
 - Epistemology
 - Metaphysics
 - Logic



 Is it not the familiar Library classification? Yes, in most cases
 But it can be anything

DL organization Depends on your users expectations



- Under each community or subcommunity, you should have collection(s).
- It is the collections that contain items (digital documents)
- Communities or sub-communities can not have items directly under them

Collections

- Collections can be organized by type of documents
- For example,
 - Theses
 - Articles
 - Photographs
 - Presentations etc.

Again, it depends on users expectations

Many ...

- You can have any number of communities and sub-communities
- You can have any number of collections under a community or sub-community
- You can have any number of items in a collection
- You can have any number of bitstreams in an item
- An item can be mapped into any number of collections (to avoid duplication in case of items belonging to more than one category)

One ...

- You can have only one
 - Metadata to an item
 - License to an item
 - One access point to a bundle of bitstreams

People associated with DSpace DLs

- Anonymous Users (anybody)
- Members, who wish to subscribe to a collection (one can not subscribe to communities). Also called E-person in DSpace
- Submitters (authors), who submit their publications to a collection (they should be members and have been authorized to submit).



- Reviewers members who are authorized to review submissions.
 They can either accept or reject submissions). Normally, they are subject specialists
- Metadata Editors who validate the metadata. Normally, they are library professionals



- Collection Administrators. In a large digital repository collection administration can be delegated various E-groups.
- They can choose the reviewers, metadata editors among members and decide the collection policy
- They are different from DSpace administrators, who have the overall responsibility and power. A kind of superuser

E-Groups

- DSpace calls the reviewers, metadata editors, collection administrators as E-groups
- It means, there can be more than one e-person (member) in any list of reviewers or metadata editors etc.

E-Groups

- Each e-group can be associated with one or more collections
- A member can be placed in none or more than one e-group

DSpace Administrator

- Create communities
- Create collections under each community
- Administration of E-People
- Creating E-Groups among E-People
- Authorizing E-Groups for each collection



- Authorizing E-People for submission
- Authorizing E-Groups to workflows for each collection
- Various Authorizations at
 - Community Level
 - Collection Level
 - Item Level
 - Bitstream level



- Can add local (non-standard) elements to Dublin Core
- Can add new bit stream formats
- Customization of DSpace Screens
- Customization of E-mail alerts
- Modification of License for submission

Workflow

- An author submits her item i.e. enters metadata and uploads the digital item
- DSpace sends e-mail to the author informing, her item is under review
- All the Reviewers of a collection will receive e-mail, informing about submission

Workflow - 1: Reviewing

- When a reviewer logs on to DSpace
- She finds submissions in the task pool
- He can read the digital item, and can
 - Approve it
 - Or reject or ask for modified submission with it with comments
- Once it is approved, e-mail will be sent to meta data editors



- If one of the reviewers completes her task, DSpace removes the submission information from the task pool of other reviewers
- Of course, it can not get back, the e-mails sent to other reviewers ©

Reviewing Policy

Repository should have clear cut policy of reviewing.

It is the reviewers and reviewing policy that make the difference between a good or bad repository.

It does not depend whether it is commercial or government or open access repository

Workflow – 2: Metadata Editing

- Though Dublin Core is meant for non-librarians, there can be some mistakes in the metadata
- Mistakes can be
 - Spelling errors
 - Wrong choice of subject descriptors
 - Entering data in wrong fields

Workflow - 2

- Once the metadata editor approves the item, e-mails will be sent to collection administrators
- Metadata editors can not reject an item
- They can either modify or approve only

Workflow - 3

- Collection administrators can either approve or reject an item
- Once he approves, the digital item gets committed to the repository, gets a persistent identifier and meta data gets indexed
- Item will be available for pubic access

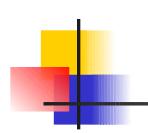
Workflow options

- The entire workflow process is optional
- Whether you want none or one or more workflows is dependent on the policy of your digital repository
- If you wish, you can allow anonymous submissions that get published on your repository without any approval (most open and worst case)

Thank You

- Visit: LDL: Librarians' Digital Library
- https://drtc.isibang.ac.in

- Become a member of LDL
- Submit your paper to LDL



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