DSpace: Administration

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DSpace captures your data in any format
  – in text, video, audio, and data.

It distributes it over the web.

It indexes your work,
  – so users can search and retrieve your items.

It preserves your digital work over the long term.

DSpace provides a way to manage your research materials and publications in a professionally maintained repository to give them greater visibility and accessibility over time.”
www.dspace.org
Repository:

A repository is an on-line open archive which makes available scientific literature (pre-prints, lectures, thesis, etc.) in digital form. Archive content usually is not subject to peer-review, but every repository has its own internal policies which regulate the archiving.
DSpace...

- **Captures**
  - Digital research material directly from the creators

- **Describes**
  - Allows descriptive, technical, and rights metadata
  - Assigns persistent identifiers

- **Distributes**
  - Searches metadata & full text
  - Delivers content over the web

- **Preserves**
  - Content in supported formats for long term preservation
DSpace administration

- DSpace administration involves a whole range of tasks the administrator has to perform for successful creation and maintenance of a digital repository.

- When we first configure a digital repository using DSpace, we begin with creating Communities and collections.

- While creating communities and collections, we also have to take a decision with regard to whom or which group can submit digital items to each collection.

- In addition, we also have to take a decision on who or which groups of members (E-people) are authorized to review, approve and modify metadata of submissions.
Steps in Administration - Essential Steps

Some steps in performing the DSpace Administration are essential and some are optional. These steps have been enumerated here.

1) Create Users who will act as reviewers, metadata editors, approvers
2) Create Communities
3) Create Collections
4) Create Collection authorizations
Steps in Administration - Optional Steps:

1) Creating Sub-communities
2) Creation of Groups
3) Modifying *Dublin Core Registry* (Discouraged)
4) Adding additional file formats to *Bitstream Format Registry*
5) Modifying or Deleting Digital Items
6) Handling *News*
Default Dspace Home

For example:  http://localhost:8080/jspui
OR
http://server_ip_or_server_dns:8080/jspui
Default Dspace Home

DSpace JSPUI
DSpace preserves and enables easy and open access to all types of digital content including text, images, moving images, mpegs and data sets
Learn More

DSpace Authorization

DSpace is Live
Welcome to our digital repository of My University research!
More exciting news to appear here.

This is a default installation
Login Into Dspace

For example: http://localhost:8080/jspui/password-login/
OR
http://server_ip_or_server_dns:8080/jspui/password-login/
DSpace JSPUI

DSpace preserves and enables easy and open access to all types of digital content including text, images, moving images, mpegs and data sets

Log in to DSpace

New user? Click here to register.

Please enter your e-mail address and password into the form below:

E-mail Address:

Password:

Log In

Have you forgotten your password?
Administration Tools

Please select an operation from the main menu.
DSpace: data models

There are five main entities which are the hub of information structure and aggregation in Dspace.

Communities: an administrative/logic grouping of one or more collections (and sub-communities); eg. faculties and departments in a single university, centers for geographically distributed organizations; projects/research area, etc...

Collections: a grouping of items which are analogous for tipology (metadata) and workflow; currently collections are the fulcrum of archive customizations.
DSpace: data models

Item: a box which contains both a document metadata and one or more bitstream bundles

Bundle: a grouping of bitstreams used to separate the original documents, those obtained from automatic process, (such as full-text extraction), archival and Creative Commons licence

Bitstream (= digital content, usually a fulltext)
How a digital repository is organized in DSpace

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

- Information Sciences
- Natural Sciences
- Humanities

Can be anything intuitive to the end user of your repository
Create Community

Community's metadata

Name: Information Sciences

Short Description

Introductory text (HTML):

Copyright text (plain text):
Sub-Communities

- Under Science one can have sub-communities as
  - Science
    - Botany
    - Chemistry
    - Zoology
Further division?

- Sub-communities can be divided into further sub-communities, such as
  - Chemistry
    - Inorganic Chemistry
    - Physical Chemistry
    - Organic Chemistry
Collections

- Under each community or sub-community, 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
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
Describe the Collection

Name:

Enterprise solutions

Shown in list on community home page

Short Description:

HTML, shown in center of collection home page. Be sure to enclose in <P> </P> tags!

Introductory text:

Plain text, shown at bottom of collection home page

Copyright text:
Describe the Collection

Please check the boxes next to the statements that apply to the collection.

- ✔ New items should be publicly readable
- ✔ Some users will be able to submit to this collection
- □ The submission workflow will include an accept/reject step
- □ The submission workflow will include an accept/reject/edit metadata step
- □ The submission workflow will include an edit metadata step
- □ This collection will have delegated collection administrators
- □ New submissions will have some metadata already filled out with defaults

Next >
Edit Group: COLLECTION_1_SUBMIT (id: 2)

Name: COLLECTION_1_SUBMIT

After making changes to this group you must click the "Update Group" button below.

EPerson Members

lst user (user@gmail.com)

Group Members

Remove Selected

Select E-people...

Remove Selected

Select Groups...

Update Group
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)
Items & Bitstreams

- The Basic digital document is called an *item*
- A bundle may consist of many files (*bitstreams* in DSpace parlance)
- Item 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
Ideal bitstreams

- 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
DSpace item consists

- Bitstream(s)
- Metadata
- License
- Plain text or thumbnail of the bitstreams
Items

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

Contd..
People associated with DSpace DLs

- **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.

Contd..
People associated with DSpace DLs

- 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 super-user.
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.

- 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
DSpace Administrator

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

- Can add local (non-standard) elements to Dublin Core
- Can add new bit stream formats
- Add Google Analytics
- 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
- He 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
Workflow – 1: Reviewing

- 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 cannot 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 public 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)
E-people 1-3 of 3

<table>
<thead>
<tr>
<th>ID</th>
<th>E-mail</th>
<th>Last Name</th>
<th>First Name</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><a href="mailto:admin@gmail.com">admin@gmail.com</a></td>
<td>DSpace</td>
<td>Admin</td>
<td>en</td>
</tr>
<tr>
<td>2</td>
<td><a href="mailto:user@gmail.com">user@gmail.com</a></td>
<td>user</td>
<td>ist</td>
<td>en</td>
</tr>
<tr>
<td>3</td>
<td><a href="mailto:saurabhdspace@gmail.com">saurabhdspace@gmail.com</a></td>
<td>dspace</td>
<td>saurabh</td>
<td>en</td>
</tr>
</tbody>
</table>
Edit Collection 123456789/6

Collection's Metadata

Name: Enterprise solutions

Short Description:

Introductory text (HTML):

Copyright text (plain text):

Submission Workflow

Submitters:

Accept/Reject Step:

Accept/Reject/Edit Metadata Step:

Edit Metadata Step:

Collection Administrators:

Collection's settings

Item template:
## Metadata Schema Registry

<table>
<thead>
<tr>
<th>ID</th>
<th>Namespace</th>
<th>Name</th>
<th>Update</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><a href="http://dublincore.org/documents/dcmi-terms/">http://dublincore.org/documents/dcmi-terms/</a></td>
<td>dc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a></td>
<td>dcterms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><a href="http://dspace.org/eperson">http://dspace.org/eperson</a></td>
<td>eperson</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 input field]  [name input field]  [save button]
<table>
<thead>
<tr>
<th>ID</th>
<th>Element</th>
<th>Qualifier</th>
<th>Scope Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>contributor</td>
<td>advisor</td>
<td>Use primarily for thesis advisor.</td>
</tr>
<tr>
<td>3</td>
<td>contributor</td>
<td>author</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>contributor</td>
<td>editor</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>contributor</td>
<td>illustrator</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>contributor</td>
<td>other</td>
<td></td>
</tr>
</tbody>
</table>
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:

Move Field

To move one or more field, select the desired fields (use control-key to select multiple) and the target schema. If the target schema already has fields with identical names the fields will not be moved.
Bitstream Format Registry

**Extensions** are comma-separated lists of filename extensions used to automatically identify the formats of uploaded files. Do not include the dot.

When you add a bitstream format, it is initially made "internal" so that it does not appear in the submission UI before you've finished editing the format metadata. Be sure to uncheck "internal" if the format should appear in the submission UI list of formats.

<table>
<thead>
<tr>
<th>ID</th>
<th>MIME Type</th>
<th>Name</th>
<th>Long Description</th>
<th>Support Level</th>
<th>Internal?</th>
<th>Extensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>application/octet-s</td>
<td>Unknown</td>
<td>Unknown data format</td>
<td>Unknown</td>
<td></td>
<td>Extensions</td>
</tr>
<tr>
<td>2</td>
<td>text/plain; charset-</td>
<td>License</td>
<td>Item-specific license agr</td>
<td>Known</td>
<td></td>
<td>Extensions</td>
</tr>
<tr>
<td>3</td>
<td>text/html; charset-</td>
<td>CC License</td>
<td>Item-specific Creative C</td>
<td>Known</td>
<td></td>
<td>Extensions</td>
</tr>
<tr>
<td>4</td>
<td>application/pdf</td>
<td>Adobe PDF</td>
<td>Adobe Portable Doccme</td>
<td>Known</td>
<td></td>
<td>pdf</td>
</tr>
<tr>
<td>5</td>
<td>text/xml</td>
<td>XML</td>
<td>Extensible Markup Lang</td>
<td>Known</td>
<td></td>
<td>xml</td>
</tr>
<tr>
<td>6</td>
<td>text/plain</td>
<td>Text</td>
<td>Plain Text</td>
<td>Known</td>
<td></td>
<td>txt, asc</td>
</tr>
</tbody>
</table>
Administer Authorization Policies

Choose a resource to manage policies for:

- Manage a Community's Policies
- Manage Collection's Policies
- Manage An Item's Policies
- Advanced/Item Wildcard Policy Admin Tool
Advanced Policy Manager

Allows you to do wildcard additions to and clearing of policies for items or bitstreams contained in a collection. Warning, dangerous - removing READ permissions from items will make them not viewable.

Collection:
- Enterprise solutions
- Open source

Content Type:
- item

Group:
- Anonymous
- Administrator
- COLLECTION_1_SUBMIT
- COLLECTION_2_SUBMIT

Action:
- READ

Add Policy | Clear Policies (warning: clears all policies for a given set of objects)
DSpace Authorization / Administer

News Editor

Add or edit text in the box below to have it appear in the top box of the DSpace home page.

You may format the text using HTML tags, but please note that the HTML will not be validated here.

News:

<h3>DSpace is Live</h3>
<p>Welcome to our digital repository of CSIR research!</p>
<p>More exciting news to appear here.</p>

Save  Cancel
Search DSpace

Search: All of DSpace

for cloud

Go

Start a new search

Add filters:
Use filters to refine the search results.

Add

Results/Page: 10

Sort items by: Relevance
In order: Descending
Authors/record: All

Export metadata

Results 1-1 of 1 (Search time: 0.010 seconds).
Submit: Describe this Item

Please fill in the requested information about this submission below. In most browsers, you can use the tab key to move the cursor to the next input box or button, to save you having to use the mouse each time.

Enter the names of the authors of this item.

Authors

<table>
<thead>
<tr>
<th>author</th>
<th>Ist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last name, e.g. Smith</td>
<td>First name(s) + &quot;Jr&quot;, e.g. Donald Jr</td>
</tr>
</tbody>
</table>

Enter the main title of the item.

Title *

Computer networks

If the item has any alternative titles, please enter them here.

Other Titles

Enter the date of previous publication or public distribution. You can leave out the day and/or month if they aren’t applicable.

Date of Issue *

Month: May  Day: 23  Year: 1992

Enter the name of the publisher of the previously issued instance of this item.

32.png  Introduction to Dspa... ppt
Submit: Describe this Item

Please fill further information about this submission below.

Enter appropriate subject keywords or phrases.

Subject Keywords

Enter the abstract of the item.

Abstract

Enter the names of any sponsors and/or funding codes in the box.

Sponsors

Enter any other description or comments in this box.
Submit: Upload a File

Please enter the name of the file on your local hard drive corresponding to your item. If you click "Browse…", a new window will appear in which you can locate and select the file on your local hard drive.

Please also note that the DSpace system is able to preserve the content of certain types of files better than other types. Information about file types and levels of support for each are available.

Select a file or drag & drop files…

Please give a brief description of the contents of this file, for example "Main article", or "Experiment data readings".

File Description:
Select a file or drag & drop files ...

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sql-server.docx</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Networking.docx</td>
<td></td>
</tr>
</tbody>
</table>

Please give a brief description of the contents of this file, for example “Main article”, or “Experiment data readings”.

File Description:
Submit: Verify Submission

Not quite there yet, but nearly!

Please spend a few minutes to examine what you’ve just submitted below. If anything is wrong, please go back and correct it by using the buttons next to the error, or by clicking on the progress bar at the top of the page.

If everything is OK, please click the "Next" button at the bottom of the page.

You can safely check the files which have been uploaded - a new window will be opened to display them.

<table>
<thead>
<tr>
<th>Authors</th>
<th>author, lst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Computer networks</td>
</tr>
<tr>
<td>Other Titles</td>
<td>None</td>
</tr>
<tr>
<td>Date of Issue</td>
<td>23-May-1992</td>
</tr>
<tr>
<td>Publisher</td>
<td>None</td>
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<tr>
<td>Citation</td>
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</tr>
<tr>
<td>Series/Report No.</td>
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<tr>
<td>Type</td>
<td>None</td>
</tr>
<tr>
<td>Language</td>
<td>None</td>
</tr>
</tbody>
</table>

Subject Keywords | None | Correct one of these
Abstract | None
Sponsors | None
DSpace Distribution License

There is one last step: In order for DSpace to reproduce, translate and distribute your submission worldwide, your agreement to the following terms is necessary. Please take a moment to read the terms of this license, and click on one of the buttons at the bottom of the page. By clicking on the “Grant License” button, you indicate that you grant the following terms of the license.

Not granting the license will not delete your submission. Your item will remain in your “My DSpace” page. You can then either remove the submission from the system, or agree to the license later once any queries you might have are resolved.

NOTE: PLACE YOUR OWN LICENSE HERE
This sample license is provided for informational purposes only.

NON-EXCLUSIVE DISTRIBUTION LICENSE

By signing and submitting this license, you (the author(s) or copyright owner) grants to DSpace University (DSU) the non-exclusive right to reproduce, translate (as defined below), and/or distribute your submission (including the abstract) worldwide in print and electronic format and in any medium, including but not limited to audio or video.

You agree that DSU may, without changing the content, translate the submission to any medium or format for the purpose of preservation.

You also agree that DSU may keep more than one copy of this submission for purposes of security, back-up and preservation.

You represent that the submission is your original work, and that you have...
Submit: Submission Complete!

Your submission will now go through the workflow process designated for the collection to which you are submitting. You will receive e-mail notification as soon as your submission has become a part of the collection, or if for some reason there is a problem with your submission. You can also check on the status of your submission by going to the My DSpace page.

Go to My DSpace
Communities and Collections

Submit another item to the same collection
Thanks