

Using DSpace for Publishing Electronic Theses and Dissertations

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Open Repositories 2010
Madrid, Spain



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Presentation Overview

- Overview of IUScholarWorks
- Introducing the Issue
- Drop Box Processor
- Embargo Patch
- Work Remaining
- Conclusion



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About IUScholarWorks

- A set of services from the Indiana University Libraries and the IU Digital Library Program
- Make the work of IU scholars freely available
- Publish and preserve the scholarly output of Indiana University



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About IUScholarWorks

- Started in 2006 as a single DSpace instance
- Now comprises multiple instances of DSpace, Open Journal Systems, and Open Conference Systems spanning several campuses
- Public URL: <http://scholarworks.iu.edu>



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DSpace (Bloomington) technical details

- DSpace 1.5.1 currently being used
- Manakin interface
- Integration with IU authentication services
- 99 communities, 360 collections
- 8500+ items



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Welcome

IUScholarWorks Repository is service of the [Indiana University Libraries](#) and [Indiana University Digital Library Program](#) to make the work of IU scholars freely available, while ensuring these resources are preserved and organized for the future. Because your work is assigned a stable, permanent Internet address readers will always find it.

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Communities

Select a community to browse its collections.

- [African Studies Program \(Bloomington\)](#) [107]
- [Anthropology Department \(Bloomington\)](#) [5]
- [Archives of Traditional Music \(Bloomington\)](#) [76]
- [Biology Department](#) [112]
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Form and Tonality in J.S. Bach's Settings of "Jesu, der du meine Seele"

[Show full item record](#)

Title: Form and Tonality in J.S. Bach's Settings of "Jesu, der du meine Seele"

Author: McIrvine, Edward

Date: 1981

Publisher: Indiana University Graduate Theory Association

Citation: McIrvine, Edward. "Form and Tonality in J.S. Bach's Settings of 'Jesu, der du meine Seele.'" *Indiana Theory Review* 5, no. 1 (1981): 1-22.

Series, #: Vol. 5, no. 1

Location: <http://hdl.handle.net/2022/6590>

Type: Article

Files in this item

Files	Size	Format	View
McIrvineFormAndTonalityV5.pdf	1.081Mb	application/pdf	View/Open

The following license files are associated with this item:

[Original License](#)

This item appears in the following Collection(s)

The Problem – How to integrate ETD's

Requirements

- IU dissertations are submitted in their final form to UMI/Proquest, who then passes them on to us
- For now, permission for publication is not being granted at time of submission; therefore, most items should not be initially viewable
- For a large backlog of files, we will need to pull out author contact information and contact authors ourselves about granting permission



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The Problem – How to integrate ETD's

Requirements

- Dissertation files to be ingested are delivered to us from UMI/Proquest as PDF's with an XML metadata file, along with possible extra files
- We need to create links between the dissertations in our repository and IU's online catalog system (IUCAT)



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The Solution

Decisions

- Automatically convert and deposit items into DSpace via a drop box
- Place an embargo on all items immediately, which will completely hide bitstreams and metadata
- Embargoes can expire automatically or be manually removed by an administrator
- Create links between DSpace and IUCAT



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Current Progress

- Drop Box and Embargoes fully implemented
- Integration with IUCAT in development
- More than 1600 dissertations in production repository, with nearly 100 publicly available
- Drop Box also used to process over 2900 items for The Medieval Review
- Currently running DSpace 1.5.1



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Drop Box Processor

- Implemented first; dissertations originally ingested into dark archive to avoid copyright issues
- Originally written in Perl; later ported to Java and integrated into DSpace code base
- Run via 'dsrun' as a cron job, similar to indexing and stat gathering commands
- Allows flexibility; each collection implemented as a separate drop box, with a collection.xml file to describe that collection's parameters



Drop Box Processor – Basic Functions

- Examine incoming folders (possibly zipped)
 - Perform any needed XSL transformations to create DC metadata, bitstreams, contents lists, and author lists
 - Ingest items into DSpace, including bitstreams, using the ItemImport class
 - Automatically set embargo terms
 - Email results, including handle URL's
 - Move original files to backup location
-



Drop Box Processor – Details

- Each item's folder is linked to a handle in the repository and this linkage is stored in a master mapfile
- If a folder is re-submitted, the new information and bitstreams will overwrite the original item rather than creating a new item
- A master author list is generated in XML, with contact information



Drop Box Processor – Details

- Drop Box used for more than just dissertations
- For the Medieval Review, drop box generates HTML bitstreams from the XML source file
- Class is generic enough to work with any DSpace (1.5.1) repository



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Collection.xml sample

```
<collection>
  <collectionName>DISSERTATIONS</collectionName>
  <metadataTransformer>UMItoDSpace.xsl</metadataTransformer>
  <eperson>sample@indiana.edu</eperson>
  <handle>2022/3086</handle>
  <embargoMonths>200</embargoMonths>
  <adminEmail>sample@indiana.edu</adminEmail>
  <dspaceLoc>https://scholarworks.iu.edu/handle/</dspaceLoc>
</collection>
```



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Embargo Patch

- Our starting point for embargoes: Johns Hopkins (Emetsger) DSpace patch to use embargoes in DSpace 1.5.1
- New database table stores embargo information on an item-by-item basis
- Embargoes can be enabled for any collection in the repository



Embargo Patch - Customizations

Our customizations fell into 4 main areas:

- Keep metadata completely hidden for embargoed items
- Alter embargo terms without removing embargo
- Allow admins to view hidden items
- Keep search and browse indexes up-to-date



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Embargo Patch - Customizations

Metadata should be completely hidden

- Items should not appear in OAI output
- Items should not appear in search and browse
- Item will not show in total item counts
- Item title should not appear when accessing item's handle



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2022/6947

This item is currently embargoed, and is not available.

Embargo Patch - Customizations

Alter embargo terms without removing embargo

- Interface changes (Java and Javascript) to allow an admin user to change, remove or add embargo
- At IU, our embargo terms include a 'pseudo-infinite' term of 200 years
- Other terms include 6 months, 1 year, and 2 years



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Administrative

Modify item: 2022/8959

Choose an embargo time period for this object. The embargo start date will be the current date.

- No Embargo
- 6 months
- 1 year
- 2 years
- 200 years



Embargo Patch - Customizations

New java class (IUSWEmbargoTask.java)
runs nightly

- For items where the embargo has recently expired, make sure item is in search and browse indexes
- For items still under embargo, make sure item is included in a (password-protected) HTML page that lists all embargoed items



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Work to be done

Link IUScholarWorks dissertations with IUCAT

- Overlay IUCAT metadata onto DSpace records automatically
- Provide Handles to IUCAT for publicly available dissertations

Better handling of hidden metadata

- Remove password-protected HTML page
- Allow true search and browse of hidden metadata for admins only



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Work to be done – community integration

Publish code as patch for Dspace 1.5.1

- Embargoes and Drop Box code are easily adaptable for other institutions
- Backend changes are relatively minor - small database changes, one additional cron task
- More documentation is needed



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Work to be done – community integration

Update changes for DSpace 1.6 and beyond

- Drop Box code written as a single class that integrates with ItemImport and should require minimal changes
- Embargoes code will require more substantial changes to fit into the embargo system of 1.6, but will be a potentially useful addition to the current embargo system



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Questions? Comments?

Contact: James Halliday
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Repository website:
<https://scholarworks.iu.edu/dspace/>



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