

Extensions and Addons Work

DSpace users are continually adding new functionality to the DSpace platform to suit their organization's needs. Some organizations/developers are willing to share their work with the larger DSpace community. The list below identifies projects that provide additional functionality to DSpace. Some of these projects are completed, other projects **may become available at some point in the future** for others to use. If you are working on a DSpace project that could become an addon/extension used by others, please add your project here.

Version compatibility

addon name \ DSpace version	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	3	4	5	6	7
Commenting		x	x											
Controlled Vocabulary/Ontology		x	x											
Dublin Core Meta Toolkit						x								
Embargo					x	built-in	built-in	built-in	built-in	built-in	built-in	built-in	built-in	
Joomla! Collections, Archives and Repositories					x									
Lightweight JHOVE format validator and virus check				x	x									
Pluggable Storage/S3					x								built-in	
Recommendation	x	x								built-in	built-in	built-in	built-in	
Request Copy				x	x						built-in	built-in	built-in	
Semantic Search for DSpace						x	x						built-in	
Statistics			x	x	x	x	x	x	x					x
Tombstoning				x	x									
Web of Communications		x	x											
Open Peer Review											x	x		
DSpace-CRIS						x			x	x	x	x	x	
CKAN Integration												x	x	
Audiovisual Streaming							x	x	x	x	x	x	x	
Video/Audio Streaming												x	x	
Content & Usage Analysis							x	x	x	x	x	x	x	
Document Streaming							x	x	x	x	x	x	x	
Document Viewer (no Flash required)												x	x	
Documents Viewer Module									x	x	x	x	x	
OCR and Transcription												x	x	
Image Zoom							x	x	x	x	x	x	x	
IIIF Image Viewer												x	x	
Information Conversion Suite							x	x	x	x	x	x	x	
Listing & Reports							x	x	x	x	x	x	x	
Metadata Quality Module							x	x	x	x	x	x	x	
Moodle Integration										x	x	x	x	
Social Networks											x	x	x	
Authority Control										x	x	x	x	
Digital Preservation												x	x	

Error rendering macro 'toc'

null

Complete

Commenting

The Commenting add-on consists in a set of classes, servlets and custom tags that bring informal communication capabilities to the DSpace environment. The informal communication is assured by a threaded forum that can be attached to any DSpace resource: web-page, community, collection, submitted item or e-person. The add-on allows comments to be inserted by anonymous users as well as by authenticated ones. Functionality for reviewing comments is also provided with the add-on.

Version Compatibility: 1.1.1, 1.2

Link: http://dspace-dev.dsi.uminho.pt:8080/en/addon_commenting.jsp

Contributor: [University of Minho](#)

Controlled Vocabulary/Ontology

Allows the user to choose from a predefined taxonomy of keywords to describe items of information that are being submitted to the repository. That same taxonomy is used to find and access items held in the repository.

Version Compatibility: 1.1.1 and 1.2

Link: http://dspace-dev.dsi.uminho.pt:8080/en/addon_ontology.jsp

Contributor: [University of Minho](#)

Dublin Core Meta Toolkit

The Dublin Core Meta Toolkit transforms data collected via different methods into Dublin Core compatible meta data. The Toolkit is ideal for converting formats from Microsoft Access, MySQL and comma delimited value (CSV).

Version Compatibility: 1.5.1

Link: <http://sourceforge.net/p/dcmetatoolkit/wiki/Home/>

Contributor: [Hayden Young](#) from Wjiti

Embargo

Allow for embargoed item metadata to be indexed and viewed, but representations of the item cannot be retrieved.

Version Compatibility: 1.5.x

Link: [Emetsger_Embargo](#)

Contributor: [Elliot Metsger](#) from Johns Hopkins University

Joomla! Collections, Archives and Repositories

Open up your digital asset repositories to the public through the Joomla! content management system. Display and browse digital assets, retrieve related items and search communities and collections and build exhibitions and galleries using your digital assets without having to install and manage complex software.

Version Compatibility: 1.5.1

Link: <http://www.openrepository.com/products/cms-integration>, <http://joomlancode.org/gf/project/j-car/> (dead link)

Contributors: [Hayden Young](#) from Wjiti, [Michael Guthrie](#) from Open Repositories

Lightweight JHOVE format validator and virus check

This patch uses JHOVE to provide rough-and-ready format checking by identifying that the file/bitstream extension matches formats verifiable by JHOVE. (Currently DSpace accepts a deposit's file extension as gospel, so a user could tack a '.txt' extension onto a GIF and DSpace would assign the incorrect format to the file based on that incorrect extension.) It also checks the file for the presence of viruses.

Version Compatibility: 1.4.x, 1.5.x

Link: <http://sourceforge.net/tracker/index.php?func=detail&aid=2309977&group%CB%8Did=19984&atid=319984> (dead link)

Contributor: University of Michigan

Lightweight Network Interface

A simple but comprehensive network interface that was developed as part of the CWSpace project. It was designed to be complete enough for most programmatic uses of the DSpace API, particularly submitting and extracting archived materials as packages or byte streams.

Version Compatibility: 1.5.2

Link: [LightweightNetworkInterface](#)

Contributor: Larry Stone from MIT

Pluggable Storage/S3

This model is conceived as a DSpace asset store API/interface. One big advantage of such an interface is the ease of writing implementations for different storage systems (file-based, grid, etc) and plugging them into DSpace.

Version Compatibility: 1.5.1

Link: [

JIRA: Unable to locate Jira server for this macro. It may be due to Application Link configuration.

SF Co

Recommendation

Recommendation Add-on provides recommendations of items related to the document currently being visualized. To install this add-on you will also need to install the Commenting Add-on.

Version Compatibility: 1.1.1 and 1.2

Link: http://dspace-dev.dsi.uminho.pt:8080/en/addon_recommendation.jsp

Contributor: [University of Minho](#)

Request Copy

The purpose of this feature is to increase both the content deposited in an IR and its immediate usability by providing a way to accommodate the (frequently unfounded) worries of authors and their institutions about copyright infringement during any publisher embargo periods on public self-archiving, by creating a semi-automated mechanism whereby would-be users can request and authors can email an individual copy of a full-text deposited with access set as A.

Version Compatibility: packaged for 1.4.x, but runs on 1.5.1 as well

Link: [RequestCopy](#)

Contributor: [University of Minho](#)

Semantic Search for DSpace

Semantic Search allows reasoning-based search and retrieval of DSpace content, using Semantic Web technologies. Using a technique known as semantic profiling it allows inference-based search and knowledge discovery that would otherwise be impossible.

Version Compatibility: 1.6.x, 1.7.x

Link: [Kotsomit](#)

[Dr. Dimitrios Koutsomitropoulos](#) from University of Patras

Statistics

An add-on to the DSpace platform that allows gathering, processing and presenting usage, content and administrative statistics. While the development was done to meet the specific needs of Reposit@riUM at the University of Minho, the system is completely adjustable to other environments as its components can easily be configured, changed or extended, to respond to different information needs.

Version Compatibility: 1.2.x, 1.3.x, 1.4.x, 1.6.2, 1.7.2, 1.8.2, compatible with Manakin?

Link: [StatisticsAddOn](#)

Contributor: [University of Minho](#)

Tombstoning

When an item is withdrawn, the user selects from 3 reasons for placing the item in tombstone: 1. Removed from view by legal order; 2. Removed from view by the authority doing removal; 3. Removed from view at request of the author.

Version:

Link:

Unable to locate Jira server for this macro. It may be due to Application Link configuration.

Contributor:

Web of Communications

Web of communications add-on draws an interconnected network of all the items and users in the repository, highlighting their interactions at the informal level of communication (e.g. comments, downloads, deposits, etc.).

Version Compatibility: 1.1.1 and 1.2

Link: http://dspace-dev.dsi.uminho.pt:8080/en/addon_webcommunication.jsp

Contributor: [University of Minho](#)

Open Peer Review

One important element missing from open access repositories is a quantitative assessment of the hosted research items that will facilitate the process of selecting the most relevant and distinguished content. Common currently available metrics, such as number of visits and downloads, do not reflect the quality of a research product, which can only be assessed directly by peers offering their expert opinion together with quantitative ratings based on specific criteria.

To address the aforementioned situation, the open peer review module, OPRM, can be installed to existing Dspace institutional or other repositories and offered as an overlay service. Digital research works hosted in these repositories could then be evaluated by an unlimited number of peers that would offer not only a qualitative assessment in the form of text, but also quantitative measures that will be used to build the work's reputation. Importantly, this evaluation system will be open and transparent.

Version Compatibility: 4 & 5

Link: <https://github.com/arvoConsultores/Open-Peer-Review-Module/wiki>

Contributors:

- The institutional repository of the Spanish National Research Council ([DIGITAL.CSIC](#))
- The repository of the Spanish Oceanographic Institute ([e-IEO](#))
- The Artificial Intelligence Research Institute of the Spanish National Research Council ([IIIA-CSIC](#)) in Catalonia
- The Multidisciplinary Laboratory of Library and Computer Sciences ([SECABA](#)) in Granada
- Registered Service Provider ([Arvo Consultores](#))



Open-Source Add-ons developed by 4Science

DSPACE-CRIS

Extend the repository functionalities to manage CRIS entities (researcher, orgunits, projects, etc.).

Version Compatibility: 1.6.2, 1.7.x, 1.8.x, 3.x, 4.x, 5.x, 6.x (in 1Q17), 7x

Link: <https://wiki.duraspace.org/display/DSPACECRIS/DSPACE-CRIS+Home>

Vendor: [4Science](#)

CKAN Integration

Add Research Data Management features to your DSpace.

Version Compatibility: DSpace-CRIS 5.6+. Compatibility with DSpace-JSPUI, DSpace XMLUI 5.x and 6.x upon request (info@4science.com)

Link: <http://www.4science.it/en/ckan-integration/>

Vendor: [4Science](#)



Add-ons Available for Purchase from

- **IIIF IMAGE VIEWER:** Use the best international standard to work with image collections and enjoy them. ([IIIF Image Viewer FINAL \(4science.com\)](#))
- **DOCUMENT VIEWER:** Explore, access and work on full documents. ([The Document Viewer FINAL \(4science.com\)](#))
- **OCR MODULE:** Promptly find the information you need from your digitized documents. ([OCR&Transcription FINAL \(4science.com\)](#))
- **AUDIO/VIDEO STREAMING:** Simplify access and reuse of audio/video content. ([Video&AudioStreaming FINAL \(4science.com\)](#))
- **ANALYTICS&REPORTING:** Powerful set of tools for Data Analysis, Reporting, and Data Visualization. ([Analytics&Reporting FINAL \(4science.com\)](#))
- **UX PLUS:** Enhance the user experience with a modern and intuitive interface to access and interact with digital content. ([UX Plus FINAL \(4science.com\)](#))
- **DATA QUALITY:** Check and manage duplicates and create a duplicate-free repository. ([Data Quality FINAL \(4science.com\)](#))
- **CONTENT&USAGE STATISTICS:** Monitor how users interact with the repository and create charts representing content. ([Content & Usage Statistics FINAL \(4science.com\)](#))
- **NETWORK LAB:** Generates dynamic graphs discovering unexpected links between people, documents, projects, events, organizations, places, etc. ([Network-Lab.png \(1920x1080\) \(4science.com\)](#))

For more info about these modules: [DSPACE ADD-ONS - 4Science](#) or contact us at info@4science.com



Add-ons Available for Purchase from

Audiovisual Streaming

In-browser playback for audio and video.

Version Compatibility: 1.7.x, 1.8.x, 3.x, 4.x, 5.x, 6.x

Link: http://atmire.com/website/?q=modules/avs&utm_source=DSpacesite&utm_medium=web&utm_campaign=addons

Vendor: [Atmire](#)

Content & Usage Analysis

Repository usage and growth tracking.

Version Compatibility: 1.7.x, 1.8.x, 3.x, 4.x, 5.x, 6.x

Link: http://atmire.com/website/?q=modules/iz&utm_source=DSpacesite&utm_medium=web&utm_campaign=addons

Vendor: [Atmire](#)

Document Streaming

In-browser viewing and searching in Documents.

Version Compatibility: 1.7.x, 1.8.x, 3.x, 4.x, 5.x, 6.x

Link: http://atmire.com/website/?q=modules/ds&utm_source=DSpacesite&utm_medium=web&utm_campaign=addons

Vendor: [Atmire](#)

Image Zoom

Zooming and panning for large photographs and images.

Version Compatibility: 1.7.x, 1.8.x, 3.x, 4.x, 5.x, 6.x

Link: http://atmire.com/website/?q=modules/lr&utm_source=DSpacesite&utm_medium=web&utm_campaign=addons

Vendor: [Atmire](#)

Information Conversion Suite

Converting repository content to multiple output formats.

Version Compatibility: 1.7.x, 1.8.x, 3.x, 4.x, 5.x, 6.x

Link: http://atmire.com/website/?q=modules/infocon&utm_source=DSpacesite&utm_medium=web&utm_campaign=addons

Vendor: [Atmire](#)

Listing & Reports

Extracting metadata into neatly formatted documents.

Version Compatibility: 1.7.x, 1.8.x, 3.x, 4.x, 5.x, 6.x

Link: http://atmire.com/website/?q=modules/lr&utm_source=DSpacesite&utm_medium=web&utm_campaign=addons

Vendor: [Atmire](#)

Metadata Quality Module

Batch metadata editing and duplicate checking.

Version Compatibility: 1.7.x, 1.8.x, 3.x, 4.x, 5.x, 6.x

Link: http://atmire.com/website/?q=modules/mqm&utm_source=DSpacesite&utm_medium=web&utm_campaign=addons

Vendor: [Atmire](#)

Add-ons Available for purchase from Arvo Consultores

Documents Viewer module

Rich document viewer for pdf formats, specifically suited to magazines and other high quality printed publications or materials..

Version Compatibility: 1.8, 3, 4, 5, 6

Link: <http://arvo.es/en/dspace-products/82-documents-viewer>

Vendor: [Arvo Consultores](#)

Moodle Integration

Integration via a REST interface, allowing the discovery, deposit and retrieval of contents from-towards a Moodle platform

Version Compatibility: 3, 4, 5, 6

Link: <http://arvo.es/en/dspace-products/107-modulo-de-integracion-con-moodle>

Vendor: [Arvo Consultores](#) & [Oficina de Cooperación Universitaria](#)

Audio-Video streaming

In-browser player for audio and video.

Version Compatibility: 3, 4, 5, 6

Link: <http://arvo.es/en/dspace-products/145-video-audio-streaming>

Vendor: [Arvo Consultores](#)

Social Networks

API Integration with Youtube, Facebook, Twitter and Disqus, allowing the publication of content on these platforms

Version Compatibility: 4, 5, 6

Link: <http://arvo.es/en/dspace-products/142-social-networks-module>

Vendor: [Arvo Consultores](#)

Authority Control

This module extends the Dspace Authority Control function to include integration with external or internal databases, containing any number of authors along his/her identifiers, visualization of identifiers on UI pages, disambiguation of authors names and management of authorities-database through csv import-export capabilities.

Version Compatibility: 3, 4, 5, 6

Vendor: [Arvo Consultores](#)

Digital preservation

This module gathers and structures a set of utilities for the management, detection and transformation of digital objects in a repository and adds the advanced capacities of verification, management and evolution of formats and files. This makes it a principal support tool for an institution's digital preservation policies.

The module can be configured to meet the institution's specific needs and to assemble a set of base functionalities:

- Format verification
- Format transformer
- Complementer /Extractor of metadata
- Antivirus verification

Version Compatibility: 4, 5, 6

Link: <http://arvo.es/en/dspace-products/143-preservation-module>

Vendor: [Arvo Consultores](#)



Add-ons Available for Purchase from 4Science

Video/Audio Streaming

Simplify access and reuse of audio/video content.

Version Compatibility: DSpace JSPUI, DSpace XMLUI, DSpace-CRIS 5.x and 6.x

Link: <http://www.4science.it/en/video-audio-streaming/>

Vendor: [4Science](#)

IIIF Image Viewer

Use an international standard to work with image collections.

Version Compatibility: DSpace JSPUI, DSpace XMLUI, DSpace-CRIS 5.x and 6.x

Link: <http://www.4science.it/en/iiif-image-viewer/>

Vendor: [4Science](#)

Document Viewer

View, access and work on full documents.

Version Compatibility: DSpace JSPUI, DSpace XMLUI, DSpace-CRIS 5.x and 6.x

Link: <http://www.4science.it/en/document-viewer/>

Vendor: [4Science](#)

OCR and Transcription

Search anything you need in your digitalized documents.

Version Compatibility: DSpace JSPUI, DSpace XMLUI, DSpace-CRIS 5.x and 6.x

Link: <http://www.4science.it/en/ocr-transcription/>

Vendor: [4Science](#)

Resources

Google Analytics Tracking Code

Add Google Analytics tracking code snippets to your DSpace instance so you can track usage.

Tutorial: <http://cadair.aber.ac.uk/dspace/bitstream/handle/2160/623/Module%20-%20DSpace%20statistics%20and%20Google%20Analytics.pdf?sequence=3>

Other link: <http://blog.stuartlewis.com/2009/01/17/update-your-google-analytics-tracking-code/>

Google Indexing of DSpace Instances

Documentation on how to set up a DSpace instance to be indexed effectively by search engines (Google and others) to help maximize the impact of content and encourage further deposits.

Wiki: [Search Engine Optimization \(SEO\)](#)

Other link: <http://mailman.mit.edu/pipermail/dspace-general/2009-May/002730.html>

Language Packages

The language translation packs (messages files) are contributed by the community are available on Sourceforge.

Summary: [Internationalization Support \(I18nSupport\)](#)

Manakin Themes

Share Manakin (XMLUI) code snippets* recipes* and themes.

Wiki: [Manakin Themes and Recipes](#)

Incomplete/Status Unknown

Bibapp

University of Wisconsin Madison and University of Illinois at Urbana-Champaign

The BibApp is a Campus Research Gateway and Expert Finder. BibApp matches researchers on your campus with their publication data and mines that data to see collaborations and to find experts in research areas. With BibApp, it's easy to see what publications can be placed on the Web for greater access and impact. BibApp can push those publications directly into an institutional or other repository.

<https://github.com/bibapp> (Project is no longer active)

Bitstream Suppression

Elliot Metsger

Prevents a bitstream from being discovered or downloaded by anonymous users. Depends on the Policy code (below). Depends on the Unit testing code (below). SVN Bitstream Suppression Branch.

<http://wiki.dspace.org/index.php/Emetsger:15xFeatureBranches>

CAS Single Sign-on Solution

Technical University of Denmark, <http://www.cvt.dk/> Center for Knowledge Technology and <http://www.nordija.com/>

Enhanced DSpace with the following features:

- Single sign-on support through CAS
- Web service support to enable user import.

The patch (1167362) created Marts 21st 2005 consist of the following:

- Media:files.tar.gz - includes the new files to the project.
- Media:doc.tar.gz - contains some documentation about the two new features.
- Media:cvt.dk.patch - the patch file.

Note that Axis requires a new version of Xerces so the existing lib/xerces.jar has to be deleted. See dspace-Patches-1167362. See CvtContribution (<http://wiki.dspace.org/index.php/CvtContribution>) for more information.

DAO+Prototype

James Rutherford

It has often struck me that DSpace would benefit from the use of Data Access Objects (DAO). If nothing else, it would make porting to alternative database platforms far easier; all we would need to do is provide alternative implementations for the DAO interfaces that worked for a given database. To this end, I have broken up some of the core classes in org.dspace.content to use DAOs. As part of the same effort, I have done some work on making the Context less data-layer dependent (by having it hold a org.dspace.storage.dao.GlobalDAO rather than a java.sql.Connection, etc). I've also introduced a proxy for the Item that is a bit smarter about when it retrieves content from the data layer, and an ArchiveManager class that takes care of some core "archive operations" (so that other core classes don't need to). The process to integration (if at all) would go as follows:

- Incorporate the new DAO classes into the codebase
- Refactor org.dspace.content.Item (etc) to use the DAO implementations of the data access methods internally
- Mark relevant methods in org.dspace.content.Item as @Deprecated
- Using the compile-time deprecation warnings as a guide, refactor the rest of the code to use the DAOs explicitly rather than hiding the functionality behind existing methods.

Without further ado, here is how I have refactored org.dspace.content.Item to use DAOs. A few important things to note:

- "old" code has been used where possible to avoid re-implementing the wheel
- I've never liked org.dspace.content.ItemIterator so I've switched to using a "real" Iterator from a List<Item>.

For examples of both of these principles, see the implementation of getItems() below. It is a fairly straightforward wrapper for the current Item.findAll(), except that it returns a List<Item> rather than an ItemIterator.

<http://wiki.dspace.org/index.php/DAO+Prototype>

Delegated Admin

Delegation of permissions. DSpace currently only supports minimal distributed management at a Collection level, in the form of Collection Administrators. However, at this point in time, there is no such thing as a Community Administrator to allow for distributed management of individual Communities. The closest anyone has gotten to implement this feature is in the now out-of-date patch: Authorization System: Delegate Admins (SF#13736513) by Andrea Bollini. Tim Donohue is working on an updated version of the Delegated Admins patch that works for the DSpace 1.5.x XMLUI (it will not work for JSPUI), but I'm sure that could be added relatively easily.

http://sourceforge.net/tracker/index.php?func=detail&aid=1373613&group_id=19984&atid=319984

ETD-ms Crosswalk

Built for OAI harvesting from other repositories by Library and Archives Canada (LAC), but could be used by any repository being harvested by ETD-ms location.

<http://mspace.lib.umanitoba.ca/ETDMS.zip>

<http://www.ndltd.org/standards/metadata/etd-ms-v1.00-rev2.html>

Masking

Elliot Metsger

Prevents items, collections, or communities from being viewed, downloaded, or otherwise discovered (e.g excluded from RSS feeds, OAI-PMH, search indexes). Only administrators can view and manage masked items.

<http://wiki.dspace.org/index.php/Emetsger:15xFeatureBranches>

Pledge Policy Prototype

Developing Scalable Data Management Infrastructure in a Data Grid-Enabled Digital Library System. Contact [kenzie \(at\) mit.edu](mailto:kenzie@mit.edu)

<http://pledge.mit.edu/index.php/Main+Page>

Policy

Elliot Metsger

An attempt to work around some of the more cumbersome aspects of DSpace permissions.

<http://wiki.dspace.org/index.php/Emetsger:15xFeatureBranches>

Sakai Integration

University of Cambridge

DSpace/Sakai integration work.

<http://wiki.dspace.org/index.php/SakaiIntegration>

SIMILE DOME Integration

Extending metadata schema support in DSpace through DF/Semantic Web technologies. SIMILE seeks to enhance inter-operability among digital assets, schemata/vocabularies/ontologies, metadata, and services. A key challenge is that the collections which must inter-operate are often distributed across individual, community, and institutional stores. We seek to be able to provide end-user services by drawing upon the assets, schemata/vocabularies /ontologies, and metadata held in such stores. (SMILE related) Richard Rodgers, DSpace Semantic Web RDF data from DSpace, drop down browse, base on RDF.

<http://simile.mit.edu/>

Statistics

Originally from University of Rochester, modified by Mark Wood at Indiana University-Purdue University Indianapolis.

Implemented for DSpace 1.1 and shows real-time total download counts at the Repository, Collection, Community and Bitstream Levels. Also shows real-time monthly download count at all of the above except the Bitstream level.

The version at IUPUI has been modified to collect viewing events through a generic plugin interface, which means that the collection side requires only building and some slight configuration changes in dspace.conf. We have an added XMLUI Aspect to add the aggregated data to the developing page, again integrated with stock DSpace solely through configuration. It needs work on the Theme to actually expose those data on the finished page, which requires a moderate amount of XSL-T work to integrate it with any local Theme customizations. JSPUI still requires patching or overlaying. We do not yet have an XMLUI version of the administrative controls. There is an SQL script to create a few new database tables, but no modifications to the existing tables.

<https://urresearch.rochester.edu/index.jsp> UR Research

Semantic Search for DSpace v2.0

Semantic Search allows intelligent search of DSpace content, using Semantic Web technologies. It has now been totally refactored as an add-on for DSpace 1.6+ and includes a series of new features.

[More Info](#)

[Google code project](#)

SymLink DSpace

Institute of Computer Science at Masaryk University in Brno, Czech Republic

The main purpose of this project is to modify the original DSpace to work with big files (e.g. video files) in a more efficient way.

<http://wiki.dspace.org/index.php/SymLinkDSpace>

Toxicological Information System (TOXIS)

Belgium Poison Center

Christophe Dupriez - dupriez@squadratic.com

Integration of 5 DSpace instances/ incorporating Pubmed publishing - This project involves a large set of modifications involving 5 instances of DSpace. The current implementation is based on DSpace 1.4.2 and has been modified for speed for use in emergency situations, importation from PubMed and other sources and enhanced links management. The five instances will be used for different internal repositories that will be cross-linked. Other planned inclusions are a JSPWiki and faceted searching. Other unique modifications include auto-complete and/or use of menus to select values, tracking of the number of uses of a particular concept for display in links and query of authority lists.

About the project: <http://eprints.cilea.it/conf/viewpaper.php?id=197&print=1&cf=11>; <http://pubmed-dspace.blogspot.com/>

Unit Testing

Elliot Metsger

Includes dependencies, Maven 2 project structure, and test harness for unit testing. Most (if not all) feature branches have this branch already merged in.

<http://wiki.dspace.org/index.php/Emetsger:15xFeatureBranches>

Vireo - Electronic Thesis & Dissertations (ETDs)

Texas Digital Library

Vireo creates a customized submission and management workflow for electronic theses and dissertations on top of DSpace. It is built using the Manakin interface framework, and consists of a single Aspect with an integrated Theme to create the customized interfaces (student submission interface and staff administrative interface).

<http://www.tdl.org/tag/vireo/>

Web Service

Aaron Zecowski from MIT and Cambridge Centre for Applied Research into Educational Technology (CARET)

The implementation exposes a web service that can be consumed by a number of applications. The initial target use cases are based on interactions with a Learning Management System (LMS). It makes no language specific assumptions so that it can be used for multiple client targets. It consists of 6 services that support the process of collection and dissemination of material in the repository by web services. These are:

- SRW Based Search (OCLC Implementation, Ralph LeVan)
- Upload Service
- Download Service
- Package Service
- Ingest Service
- Session Setup Service

<http://wiki.dspace.org/index.php/WebServiceForDSpace>

Web Services Prototype

rrodgers(at)mit.edu.

For item ingest and access. Not production-ready. Tar contains code and install instructions: [Dspace-ws.tar](#)

WindMusic.org

CDMC Haute Alsace (Upper Alsace Center for Music and Culture)

Christophe Dupriez - dupriez@squadratic.com

A W3C SKOS compatible authority files list and thesaurus addon. The result of this project will be implemented in the Belgium Poison Center project.