AOD 2.0:
A category based submission add-on for DSpace 4.0

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In 2010, the United Nations agencies of FAO and UNESCO-IOC announced a joint initiative to provide a customized version of DSpace:

- to promote **open access** to scientific literature in the field of **oceanography, agriculture and related sciences** available in digital form;
- to assure good **metadata quality** and the use of thesauri and other forms of **authority control**;
- to develop **sustainable** repositories that are more accessible and visible;
- The customization is branded AgriOcean Dspace (AOD), and integrates the previous developments of both UN agencies in one customized version of DSpace.
customization of Dspace

- extended OAI-PMH interface with multilevel metadata formats: MODS, AGRIS AP, VOA3R AP
- use of controlled vocabularies (ASFA, AGROVOC)
- use of authority control for journals (ASFA and AGRIS list)
- availability of type based submission module
- Batch import functionality on submitter level

- easy to install version for Windows

- Based on Dspace 1.7.2 JSPUI

- Launched in 2010
AOD Community

- UNESCO-IOC – FAO – VLIR-UOS:
  - OceanDocs: >50 institutes from Africa and Latin America
  - Afrilib (OdinAfrica)
  - IBSS(Ukraine) & CEEMAR (East-European network)
  - Ministry of Agriculture (Peru)
  - DPM, Senegal
  - KMFRI & KARI, Kenya
  - JIMMA University (Ethiopia),
  - VLIR-UOS Network of Cuban universities.

- Harvested by AGRIS & VOA3R

- Background information:
  - [http://aims.fao.org/agriocean-dspace](http://aims.fao.org/agriocean-dspace)
  - oceanteacher
AOD 2.0

- Focus
  - High level metadata quality
  - Simple & easy submission interface

- But:
  - Developed as independent modules
Metadata quality

- Rich metadata standards (Multilevel)
  - Refined metadata: To format the source: ex. *Acta Oceanográfica del Pacífico, 9*(1). *p. 103-114*, you need separate input elements
  - Use of ontologies: AGROVOC, ASFA, Geonames, ...
  - Unique identifiers: Author ID’s, ISSN, DOI, Resource **URI**’s

= Granularity

= Unique definition/identification of elements

- The relevance of metadata quality becomes visible on the service side.
Ontology plug-in

- Access to vocabularies through web services – implemented:
  - Agrovoc – VocBench
  - ASKOSI: harvester of vocabularies & ontologies (Destin)
- Java application:
  - Ontology Server (JAVA – servlet based) which implements the search and browse API
  - An Ontology client for the user interface written in Javascript, calls the Ontology server.
  - Freemarker
Ontology plug-in 1
Ontology plug-in 2

- River fisheries - vbagrovoc - http://aims.fao.org/aos/agrovoc/c_6615
- Lagoon fisheries - asfa - asfa_6810
- North Atlantic Ocean - nerc - seavoxbody_1
- Western Atlantic - vbagrovoc - http://aims.fao.org/aos/agrovoc/c_29125
Category based submission module

- Conceived as an independent tool:
  - No connection with DSpace or other software
  - No databases (Temporary results are for example saved locally as XML files)

- Larger usability:
  - ex. Ontology plug-in tested for ePrints
  - Use as ‘RichDeposit’ tool with SWORD at the backend
  - Integration in DSpace

- Developed using simple Java Servlet technology,
  - with FreeMarker & Javascript
Category based submission module 1
Category based submission module 2
Form Building blocks

The input form is based on building blocks.

Every category xml file refers to its building blocks.
To do

- Integration in Dspace 4.x:
  - Main problem: the integration in the Dspace workflow, as well for JSPUI as for XMLUI.
  - REST API has only read options
  => Specific write functionalities have been developed
  => Security problems

- Specific modules for Dspace
  - Integration of the Category-based Submission module in DSpace
  - Batch Import for Submitter: through the web interface.
  - Easy installer: A full integrated installation procedure
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Information
- http://aims.fao.org/community/group/agrioeocean-dspace

Code at:
- https://code.google.com/p/ontology-plugin/
- https://github.com/AgriOcean