Open source software for building open access repositories

Imma Subirats Coll
knowledge and information management officer
FAO of the United Nations
Introduction

Description of three open source softwares for building open access repositories

- Eprints Software
- Dspace
- Fedora Commons

Comparative analysis

Use

- Use Cases
- Agriculture & Related Sciences
- Worldwide
Software
Eprints Software

Developer University of Southampton
Stable release 3.2.0 / March, 2010
Written in Perl
Operating system Cross-platform
Development status Active
Type Institutional repository software
License GPL
Website http://software.eprints.org
Developer: DSpace Foundation
Stable release: 1.6.0 / March 2, 2010
Written in: Java
Operating system: Cross-platform
Development status: Active
Type: Institutional repository software
License: BSD licence
Website: http://www.dspace.org
Fedora Commons

**Developer** Cornell University Information Science & University of Virginia Library

**Stable release** 3.3 / December 21, 2009

**Written in** Java

**Operating system** Cross-platform

**Development status** Active

**Type** digital repository

**License** ECL (Apache derived)

**Website** [http://www.fedora-commons.org/](http://www.fedora-commons.org/)
Evaluation*

*Nicolai, Claudia; Subirats, Imma; Bagdanov, Andy (2008) Evaluating Selected Open Source Repository Systems for the FAO Open Archive DSpace and Fedora Commons
Community, Activity, Longevity, Support, Documentation & Security
Functionality

- C10. Quality and configuration of workflow tools
- C11. Internationalisation
- C12. Support multiple installations on platform
- C13. System administration and monitoring
- C14. Migration from previous versions
- C15. Extensibility and quality
- C16. Performance

Fedora  |  Dspace  |  Eprints
-------|---------|--------
1.5     |  2.25   |  4.0   
5.0     |  5.0    |  5.0   
4.0     |  4.0    |  4.0   
3.5     |  3.5    |  3.5   
4.0     |  4.0    |  4.5   
4.5     |  3.5    |  4.5   
2.5     |  2.5    |  3.5   
4.5     |  3.5    |  4.5   
3.5     |  4.5    |  3.5   

Graph showing the comparison of functionality across different systems.
Integration & Modularity

C17. Interoperability
C18. OAI-PMH compliance
C19. SRU/SRW compliance
C20. Open URL Persistent links
C05. Flexible and modular system architecture

Fedora
Dsape
Eprints
Metadata, Statistics & Reports, Preservation

C22. Customizable metadata schema
C23. Use of multilingual controlled vocabularies
C24. Import metadata
C25. Authority control
C26. System generated usage statistics
C27. Versioning system
C28. Long term preservation strategy

Fedora
Dscape
Eprints
Eprints Software

- Manages full text and metadata
- Easy full text upload
- Easy to install
- Development centralized by the University of Southampton
- Out of the box
DSpace

- Manages full text and metadata
- Easy upload of full texts
- Possibility to build collections
- Large and active user community
- Easy to install
- Strong preservation policy
- Out of the box
Fedora Commons

Integration
Preservation
Modularity
Enriched metadata management
Security
Use Cases
Relationships between the digital objects [language versions, different editions and monographs/analytics]

Workflow integrating electronic publishing and cataloguing.
Usage of Open Access Repository Software

TOTAL = 1620 repositories

DSpace (531 = 33%)
(Unknown) (338 = 21%)
EPrints (269 = 17%)
Digital Commons (74 = 5%)
OPUS (54 = 3%)
Diva-Portal (23 = 1%)
HTML (23 = 1%)
Wildfire (23 = 1%)
(65 Others) (285 = 18%)
Usage in Agriculture*

*Subirats, Imma; Dister, Sarah; Keizer, Johannes (2010) Use of Technology and Semantics in Open Access in Food, Agriculture, Development, Fisheries, Forestry and Natural Resources
Thank you for your attention

Imma.subirats@fao.org