DSpace Positioning

1 Institutional Repository Platform
2 Digital Collection Management
3 Current Research Information System (CRIS) / Research Information Management System (RIMS)
4 Data Repository
5 Learning Object Repository (LOR)
6 Digital Preservation System
7 Web Content Management System (WCMS)

This page presents an attempt to document which platforms DSpace is often compared with and what particular strengths and weaknesses are.

Institutional Repository Platform

DSpace is most known as a turnkey platform for building institutional repositories.

Examples of DSpace used as an Institutional Repository include:

- World Bank Open Knowledge Repository
- Digital Access to Scholarship at Harvard
- DSpace@MIT
- BORA at Bergen University College

In the open source realm DSpace is often compared with:

- Eprints
- Fedora
  - In combination with Drupal and Islandora: Example
- Invenio by CERN

In the commercial realm DSpace is often compared with:

- Innovative (formerly VTLS) VITAL
- Digital Commons

Features that make DSpace strong in this area:

- Dublin Core metadata support
- Customizable workflows, submission forms that can be defined on a per collection basis
- OAI-PMH
- Embargo, licensing and other access control features
- Very good Google Scholar indexing results
- OpenAIRE compliancy

External articles about DSpace in this area:

- ...

Digital Collection Management

Without adhering to a particular definition, usage of DSpace as a digital collection management system is generally less document centric and can embody collections of all kinds of digital assets. In this use case, rich user interfaces and support to render particular types of content directly in the browser are important.

Examples of DSpace used as a Digital Collection Management System include:

- Pandektis
- Windmusic
- Pittsburgh Symphony Archives
- State Library of Massachusetts Archives
  - With over 700,000 items, one of the largest public installations of DSpace in terms of item count.

In the open source realm DSpace is often compared with:

- Greenstone
- Omeka

In the commercial realm DSpace is often compared with:

- ContentDM
- IntraLibrary
- Digitool
Current Research Information System (CRIS) / Research Information Management System (RIMS)

The overlap between DSpace and the realm of CRIS/RIMS systems comes from the fact that publications, usually stored in DSpace, are important objects in a CRIS system. The overall concept of a CRIS system is broader and encompasses rich objects for staff, projects, grants etc. DSpace-CRIS extends the data model of DSpace to manage entities and attributes, with their reciprocal links, that represent research information and populate the research domain according to the CERIF standard.

- DSpace-CRIS extension

Examples of DSpace-CRIS used as a CRIS + Institutional repository include:

- University of Hong Kong, China, http://hub.hku.hk/
- National University of Singapore, Singapore, https://scholarbank.nus.edu.sg/
- Hamburg University of Technology, https://tore.tuhh.de/
- Portal de la Recerca de les Universitats de Catalunya, https://portalrecerca.csuc.cat/prc
- Cyprus University of Technology, http://ktisis.cut.ac.cy/

In the open source realm DSpace is often compared with:

- VIVO (a software and an ontology for representing scholarship)
- JResearch in conjunction with Joomla

In the commercial realm DSpace is often compared with:

- Symplectic Elements
- PURE from Elsevier
- Converis from Thomson Reuters

Features that make DSpace-CRIS strong in this area:

- Flexible data model compliant with the CERIF standard
- Pre-configured entities for the research domain
- Contextualized dynamic components
- Statistics available at all levels of hierarchy and aggregated statistics of linked entities
- Researcher's profile and CV
- Complete ORCID v3 integration (pull/push of profiles, publications, projects)
- Integration with bibliographic and bibliometric databases
- Management of hierarchical metadata

External articles about DSpace-CRIS in this area:


Data Repository

In recent years, DSpace is increasingly being used to store research data.

Examples of DSpace as a data repository:

- Dryad
- Edinburgh DataShare
- Data Repository for the University of Minnesota
- University of Exeter ORE: 15TB dataset, chunked into 20GB files, in a single DSpace item.

In the open source realm DSpace is often compared with:

- Dataverse (it features versioning, access to unpublished datasets for members of the research group, M2M data streaming - this last feature was added to DSpace with the CKAN integration)

Features that make DSpace strong in this area:

- Persistent URLs and unique identifiers
- Item and bitstream versioning
- Checksum generation and verification
- Bitstream format registry
- Integration with CKAN for data visualization and M2M streaming for data analysis
- OpenAIRE compliance

External articles about DSpace in this area:

- Edinburgh DataShare: Tackling research data in a DSpace institutional repository
- Guidelines for Research Dataset Contributions in DSpace@MIT
Learning Object Repository (LOR)

Examples of DSpace as a Learning Object Repository:

- Open Educational Resources at the African Virtual University
- University of Nottingham Open Courseware
- OER UC Louvain

External articles about DSpace in this area:

- Seminar "Learning Object Repositories with DSpace"
- Building an Open Social Learning Community Around a DSpace Repository on Statistics

Features that make DSpace strong in this area:

- Ingestion and Exporting in different packaging formats (AIP, but potentially IMS, SCORM, ...)

Digital Preservation System

Digital preservation systems intend to safeguard assets for the long term.

Commercial Digital Preservation systems

- Tessella

Features that make DSpace strong in this area:

- Checksum checker
- Bitstream format validator
- Distributed asset storage
- AIP import & export + link with Duracloud

Web Content Management System (WCMS)

Wait? DSpace is not a CMS, right? Because of its user interfaces and pages for collections, communities, in combination with good search and browse functionality, DSpace has been preferred in some usecases compared to more traditional CMS systems. Another reason to include web content management systems here is because some users contemplate building repository functionality and specific metadata support into their WCMS platforms.

Open Source content management systems

- Drupal and the Bibliography Module
- Wordpress
- Joomla and JSpace and JSolr extensions

Commercial web content management systems

- MS Sharepoint

Features that make DSpace strong in this area:

- Search features and faceted browsing
- Neatly formatted item pages