

DSpace



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Agenda

Prologue

What is DSpace

Why DSpace

Coverage in Training Course



What is DSpace?

- Digital Object management system
 - Creates, searches retrieves digital objects
 - Facilitates preservation of digital objects
 - An open source software
 - Allows open access and self archiving
 - Allows building Institutional Repositories/Subject Repositories
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S/W requirements

- UNIX recommended (Java-based program; should run on any platform)
- Java Servlet engine (Apache Tomcat or Resin or Jetty, or JBoss)
- Uses open source PostgreSQL relational database or commercial Oracle



What DSpace can do?

- Captures
 - Digital content in any format directly from creators (e.g. researchers, authors)
 - Describes
 - Descriptive, technical, rights metadata
 - Persistent identifiers (CNRI, DOI, ARCID or Local Handles)
 - OAI-PMH version 2.0 compliant
 - Allows metadata Crosswalks
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Possible Content

- Preprints, articles
- Postprints
- Technical Reports
- Conference Papers
- Theses/Dissertations
- Datasets (Dryad uses DSpace)
 - e.g. statistical, geospatial, scientific



- Images

 - *visual, scientific, etc.*

- Audio files

- Video files

- Text Files

 - Spreadsheet, Presentation, PDF
etc.



Interface

- JSPUI
 - XMLUI
- Manakin
- Rubric
- Classic
- Mirage
- Mirage2



File Formats

- Known/supported
 - Ex: TIFF, SGML/XML, PDF
- Known/unsupported
 - Ex: MS Office
 - LibreOffice Suite
- Unknown
- **NOTE:** To be decided by administrator what formats he would support future migration



Information Model

- **Communities**
 - Departments, Labs, Research Centers, Schools based on Disciplines/Subjects
- **Collections**
- Items
- Digital Objects
 - Multiple formats - same content
 - Complex objects – multiple files



Intellectual Property

- By default grants DSpace non-exclusive right to acquire, manage, preserve, distribute the item
- One may opt any Creative Commons license
- Copy of license gets stored with item



Backend Technology

- Apache/NGINX, OpenSSL
- Java, JSP, Tomcat/Jetty/JBoss
- PostgreSQL
- CNRI Handle System (persistent ids)
- Lucene(index/search)
- Solr (Statistics)
- OAIcat (OAI-PMH)

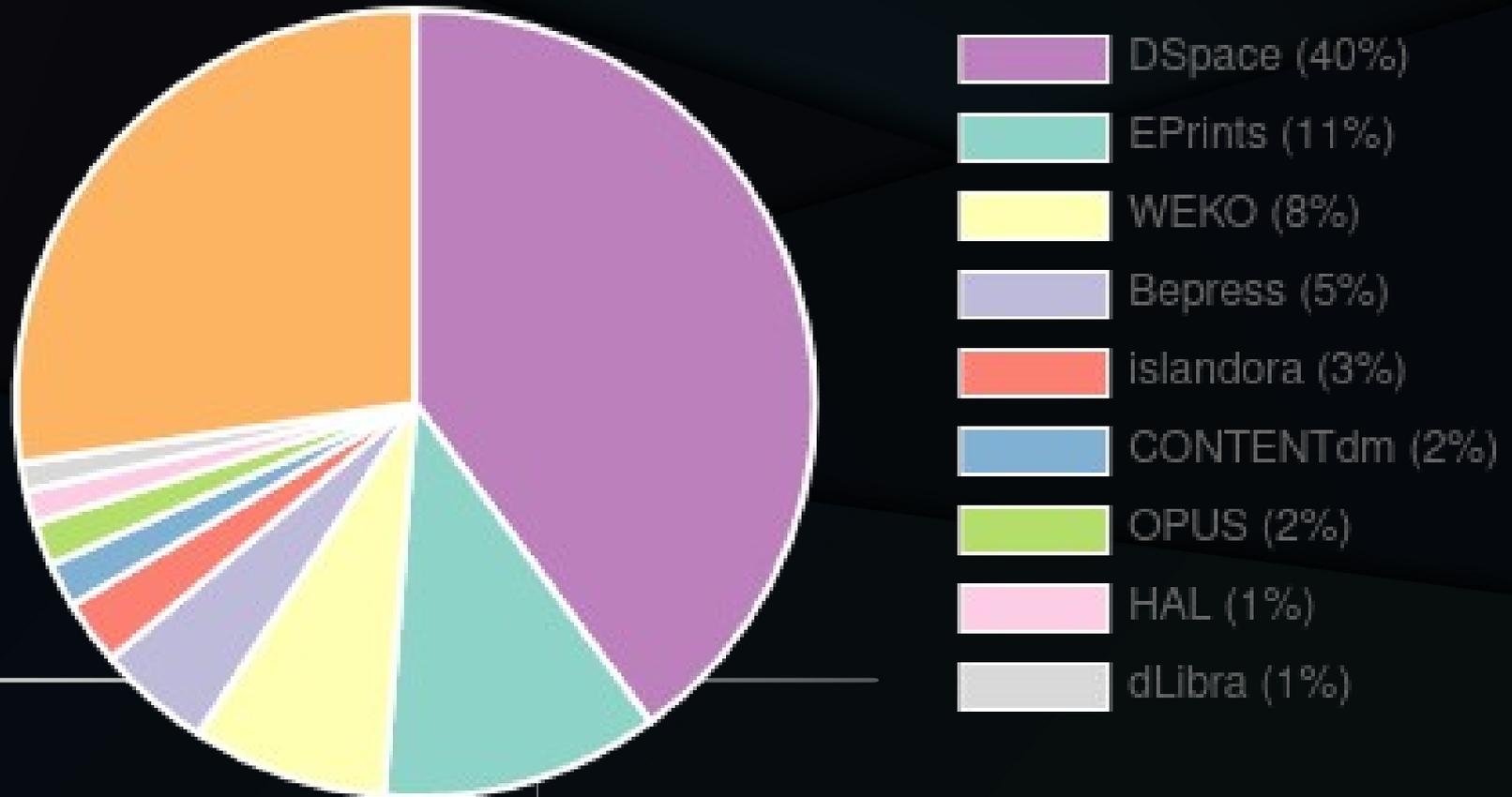


Standards Support

- OAI-PMH
- OAI-ORE
- QDC etc.
- UNICODE
- QDC
- RSS/Atom



Source: OpenDOAR



Dspace Implementation

- United States (316)
- India (212)
- Bangladesh (23)
- Pakistan (15)
- Nepal (6)

Next Version: 7.0

UI: Angular replacing both JSPUI and XMLUI

May not have much changes in functionality



Coverage in Training Course

- Overview of DSpace
 - Information Organization Model
 - DSpace users
 - Workflow
 - Administration
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Thank You

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