Biblos - e Archivo

METS in Biblos-e Archivo

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Overview

Biblos-e Archivo is the name of the Institutional Repository (http://digitool-uam.greendata.es) developed by the Autonomous University in Madrid (UAM) according to OAI-PMH standards. Since 2006 it has provided a platform to collect the scientific work whether published or not, done by the researchers from this University in order to promote the University researchers´ impact and highlight the research carried out. Biblos-e Archivo contains scientific journals, conference proceedings both published by UAM, theses, as well as articles, books, book chapters, conference papers and technical reports. Additionally it holds a small collection of old books. Due to technical and administrative problems up to October 2008 only theses were loaded, but nowadays most of them have been solved and the project has been re-launched.

About the Repository software

Digitool is the ExLibris software used. Digitool was chosen primarily as it provides a workflow system to manage a repository. It supports both institutional repositories and special collections offering multiple benefits to librarians and end users. Its main characteristics are:
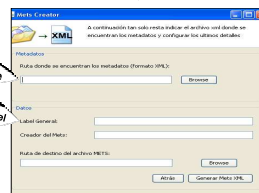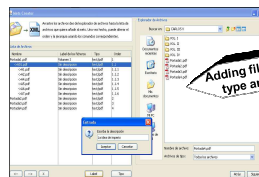
- A standard-based system: due to its interoperability with other ExLibris products such as SFX, or MetaLib (the most widely used in Spanish University Libraries).
- Its open architecture: being able to interactive with other systems.
- A flexible structure: ensures support for a range of file formats and a variety of collections.

Digitool supports multiple administrative units. Each unit can manage and control its collections according to its needs, but all of them are shown as a unique repository. Digitool allows for the use of different metadata schema such as Marc, Dublin Core, Mods (Metadata Object Description Schema) and METS (Metadata Encoding Transmission Standard).

Digitool uses the METS standard to describe a group of files with parent-child relationships which constitute only one object. The METS structure map in this software allows showing a multi hierarchical level description of an object, such as a thesis appendixes, a monography in several volumes, or a scientific journal. Biblos-e uses METS to show these describing a volume as a whole rather than coming down to the article level. The content files may be in any format, text, video, audio and image or can be a combination of them.

Mets Creator

Considering the METS XML file creation too hard, the Library asked Greendata (the ExLibris branch in Spain) to develop a programme which would be able to create an XML file by adding the necessary information easily. As a result "Mets creator" was developed, allowing the generation of METS documents easily and automatically.

Adding files, labels, type and order

Metadata file

Mets´ Main Label

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METS: Metadata Encoding & Transmission Standard

METS is a Digital Library Federation Initiative which attempts to build upon the work of MOA2 (Making of America II project) and "provide an XML format for encoding metadata necessary for both management of digital objects within a repository and exchange of such objects between repositories" (http://www.loc.gov/standards/mets).
A METS document can be defined as an XML schema designed to create XML documents which describe the whole structure of the digital objects, with all the file names, locations and the metadata linked to both the whole entity and each of the objects which constitute it. It can perform the functions of: Submission Information Package (SIP) according to the object ingests, load and transfer process; Archival Information Package (AIP) when the object is properly stored and Dissemination Information Package (DIP) when the object is delivered.

It holds seven major sections :

- **METS header (<metsHdr>)**, which contains metadata describing the document itself (creation and revision dates, METS creator, record status, etc.).
- **Descriptive metadata (<dmdSec>):** that is descriptive metadata external to the document (<mdRef>) and supplied by the library management system (Unicorn in the Autonomous University), or contains internally (<mdWrap>) embedded within the document or both.
- **Administranistrative metadata (<admSec>).** This section provides information about the files which make up the digital object. There are four main types: technical metadata (<techMD>), intellectual property rights metadata (<rightsMD>), source metadata (<sourceMD>), and digital provenance metadata (<digiprovMD>). And as in the previous section they can be external or internal.
- **File section (<fileSec>).** It is the list of files the digital object consist of and can be divided into groups (<fileGrp>) which contain distinct object versions.
- **The Structural map (<structMap>)** is the most important part of a METS document, because it gives a hierarchical structure (order, structure and labels) to the files contained in the field group section, linking them. This structure encodes the hierarchy as nested series of subsections/division elements (<div>).
- **Structural links (<smLink>).** This section allows recording the existence of hiperlinks between items within the structural map.
- **Behavior section (<behavior>).** It is used to associate executable behaviours with content in the METS document.

Finally,
a METS document in Biblos-e Archivo

Ingesting the XML and the object files, the METS document is created: