



# Implementing an Integrated Digital Asset Management System: FEDORA and OAIS in Context

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### Structure

Background and overview

OAIS Model

- Why OAIS?
- Overview
- Ingest
- Archival Storage
- Access
- (Administration, Data Management)
- METS
- Integration as a project (Issues and Tasks)

### **Institutional Context**

The LLGC DAMS is safekeeping for Wales' digital assets but, it is an element within a wider Digital Asset Management Solution, which is an element within the library's integrated systems, which come together to:

... preserve and give access to all kinds and forms of recorded knowledge, especially relating to Wales and the Welsh and other Celtic peoples, for the benefit of the public including those engaged in research and learning.

### **Institutional Context**

#### IMS Procurement high level deliverables:

- ✓ Improves efficiency and substantially simplifies the Library's technical architecture and infrastructure.
- ✓ Interfaces seamlessly across different parts of the Library with links to, for example, remote document delivery systems.
- Conforms to and interfaces with international standards and related activities based on an open architecture.
- ✓ Is open and hospitable to external user systems, e.g. for document requesting, resource discovery and inter-library loans.
- ✓ Is operational with successfully migrated legacy data and data from external sources.
- ✓ Accommodates the functions of the National Screen and Sound Archive of Wales.
- ✓ Is open and hospitable to the information community in Wales e.g. for data exchange, maintenance and storage, and for the ingest of electronic resources.

### Institutional Context: Development Aims

- History of development with Fedora
- **Key Aims:** 
  - Add functionality to VITAL
  - Developments in line with communities (Fedora, Vital and other DAMS)
  - Skills and Resources
    - Cataloguers experience
    - Re-use skills
  - Single Search
  - Solution to adhere to Standards; METS, PREMIS, OAIS, TDR etc etc

### **OAIS Overview**



# Why OAIS?

Useful Overview
Standard and 'tested'
Overlaps with TDR (medium-term goal)
Granularity

But...

Not overly restrictive (*interpretation?*).
Complex & inaccessible





# **Modelling: Ingest**



## **Rules for being an AIP**

- Every object will have a MARC record (at some level) within the IMS
- Every object in the repository will have a METS document
- Every object will have DC for OAI-PMH
- METS will be our SIP, AIP and DIP
- METS will be the policy, FEDORA services will enact the policy.
  - eg. DC Section in METS populates the DC datastream
  - eg. Structural Map held in METS, structure in RELS-EXT datastream



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### **METS** Creation



METS SIP

JHove DC Mods PREMIS Technical – MIX Behaviour METS:Rights METS:StructuralMap etc.

# **Ingest Revisited**



# **Modelling: Archival Storage**



# **Object Model (AIP): Still Image**



# **Metadata Types & Locations**



Model 1: Archival Storage - Error Checking





# **Archival Storage Revisited**



# **Modelling: Access**







### **Access Revisited**



# **Briefly: Administration?**



## **Briefly: Data Management?**



### METS

METS as SIP, AIP and DIP
Contains Metadata from:

JHOVE/Automatically Extracted
RightsMD
DescriptiveMD (minimum required for locating)
PreservationMD

METS functions as the **rules** not the **enforcement mechanism** 

### **Key Issues for Integration**

Seamless Transition IMS to DAMS ■ Skin Language choice Persistent Session Search history ■ Cart Shared Rights ■ LDAP Single Sign on

# **IMS Linking (Developments)**

Updating of MARC Records in IMS
Ingest of descriptive metadata from IMS
Single Search & Sign On
Transparent Dissemination Experience
Rights Management

# **Managing the Implementation**

- Implementation Group comprising mix of standards, IMS project management, technical, and digitisation staff. *Carried over from pilot.*
- 2 DAMS Implementation Managers (Systems & Technical)
- Key interactions with other personnel as required.

# **Managing the Implementation**

#### Milestones:

- Migration of existing Digitised Material
- Switch over to VITAL for delivery of assets
- Ingest of other existing formats (eg. VDEP, Websites, A/V)
- Implementation of further disseminators required for access.



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