Working with OAIS

Digital preservation in theory and practice: the experience of Archaeology Data Service / AHDS Archaeology

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Working with OAIS: Overview

• What is the ADS?
• Functions of an OAIS?
• The Digital Pipeline

• Submission (SIP)
• Archive (AIP)
• Dissemination (DIP)
What is the ADS?

‘... to support research learning and teaching with high quality and dependable digital resources’

Archaeology wing of AHDS (AHDS Archaeology)
Funded by AHRC, JISC and others
The 4 things we do all day

- Digital preservation
- Guidance for data creators
- Access to data
- Guidance for funders

OAIS!!!!
Core Functions in OAIS

- Negotiate for appropriate deposits
- Obtain sufficient control of resources
- Determine scope of community
- Ensure independent utility of data
- Follow procedures for preservation
- Disseminate
Administrative and managerial functions

Curatorial Functions

Research

Ingest → Preservation → Del. Prep. → Interface → Release

Deep Storage → Nearline backup

Publish
A simple OAIS diagram
SIP: Submitting Information

Community interaction
Agreeing File Formats and Metadata
Negotiation on interface and constituents
Deposit licence
Delivery and receipt processes
Accession and Management
SIP to AIP – Ingest checklist

1. Check data for viruses
2. Can we read the CD/can we open the files?
3. Check file counts against documentation provided
4. Is documentation adequate for data provided?
5. Run checksum on CD
6. Copy data to server
7. Run another checksum and compare
8. Replace spaces in filenames with underscores
9. Scan licence agreement and store with SIP
10. Record receipt of data in management database
11. Create receipt to send to depositor
AIP: assembly

Assemble parts of AIP:
- Original submission
- Admin documents and metadata
- Preservation copies of data
- Dissemination copies of files
- Transformation metadata
AIP directory structure

- **{AIP identifier}**
  - **previous**
    - Previous versions of deleted or altered files
    - **{date}**
    - **{date}**
  - **admin**
    - Correspondence Deposit forms Licence forms Metadata files
    - **{date}**
    - **{date}**
  - **original**
  - **ahds**
    - All content created by AHDS
    - **dissemination**
    - **preservation_dissemination**
    - **preservation**
      - **documentation**
        - Each sub-directory should be further sub-divided into documentation and data
      - **{format}**
    - **{arbitrary}**
    - **{arbitrary}**
AIP: Procedures

What goes where
Format and transformation manuals
Documenting transformations
Administrative information
AHDS Preservation Manuals

http://ahds.ac.uk/preservation/ahds-preservation-documents.htm
DIP: Preparing for Dissemination / Access

Community interaction
Design and implementation
Internal procedures and checklists
Quality Checks  
Depositor review / peer review
Release
DIP: Access

http://ads.ahds.ac.uk/catalogue/

http://ads.ahds.ac.uk/catalogue/resources.html?spitalfields_var_2001
...then continuous active management

Technology watch: has anything changed?

- No
- Yes

Create new AIP
Compliance and the ADS?

- Negotiate for appropriate deposits?
- Obtain sufficient control of resources?
- Determine scope of community?
- Ensure independent utility of data?
- Follow procedures for preservation?
- Disseminate?