

# Preservation Metadata

Deborah Woodyard

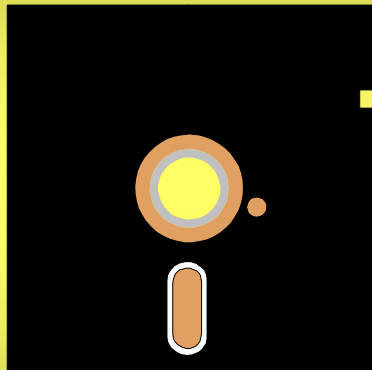
Digital Preservation Co-ordinator

## Metadata

- Categories:
  - Descriptive
  - Administrative
  - Structural
- Other variations:
  - Legal
  - Technical
  - Preservation

## Why have preservation metadata?

Metadata for discovery  
and management

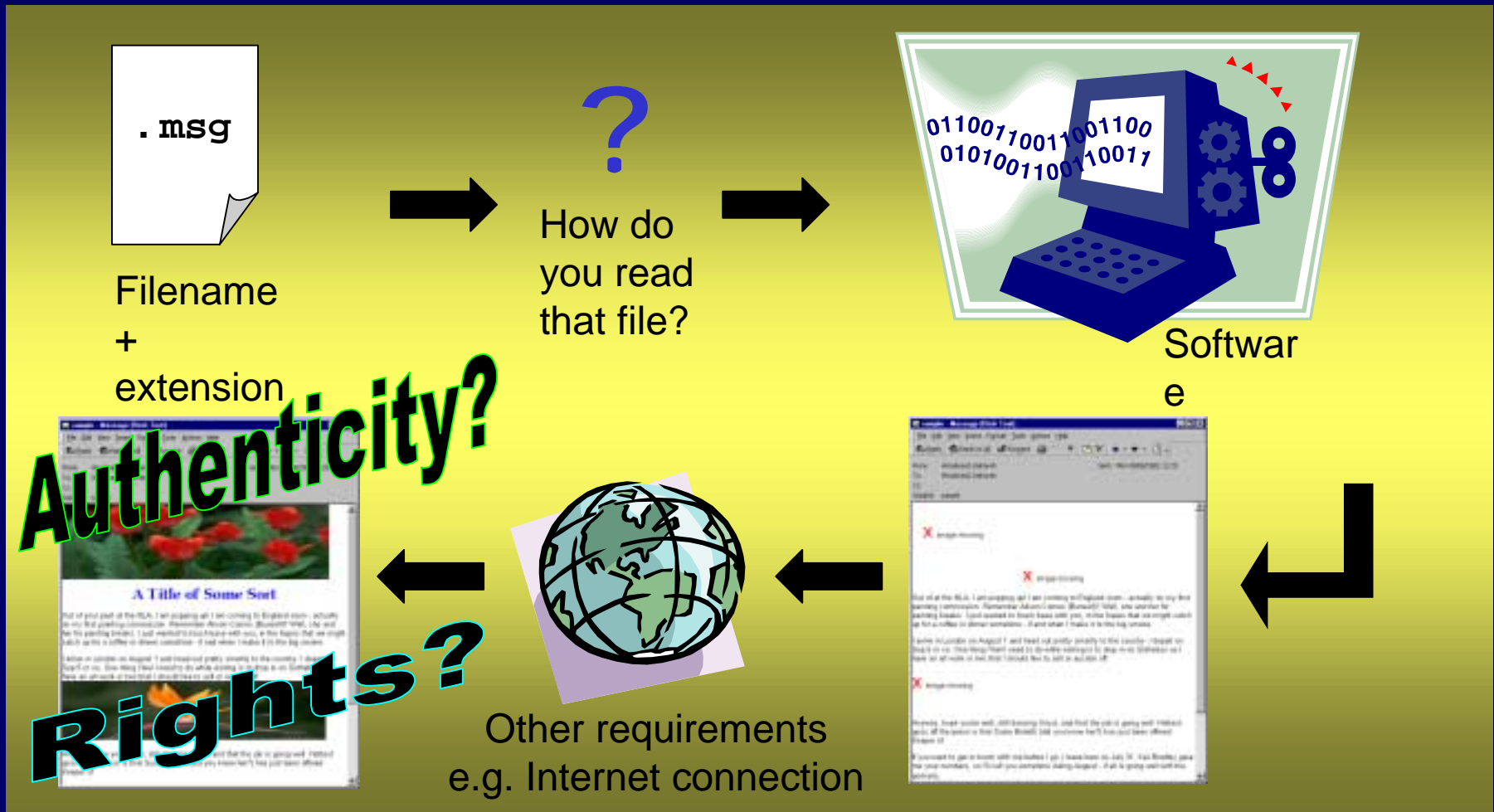


Hardware



Drivers  
Operating system  
Application  
software

## Why have preservation metadata?



## Preservation metadata

Information to aid long-term preservation:

- Technical details describing files, structure & instructions for use
- History of all actions performed on the resource, including changes & decisions
- Authenticity information i.e. technical details & history of custody
- Responsibility and rights information for preservation actions

## Current activity : guiding principles

### Reference Model for an Open Archival Information System (OAIS)

developed by the Consultative Committee for Space Data Systems

- Packaging Information  
(i.e. how and where the bits are stored)
- Content Information including Representation Information  
(i.e. how to interpret the bits into data)
- Preservation Description Information including
  - Reference Information
  - Context Information
  - Provenance Information
  - Fixity Information  
(i.e. how to interpret the data into information)

## **Current activity : framework development**

Online Computer Library Centre (OCLC) and Research Libraries Group (RLG) Preservation Metadata Working Group

Reviewed metadata sets developed by

- Cedars (CURL exemplars in digital archives)
- National Library of Australia (NLA)
- NEDLIB (Networked European Deposit Library)
- RLG

Comparison of preservation metadata elements aligned with OAIS principles

## Content Information

### Representation Information (Content data object description)

- Technical details of files and resource structure
- How the resource appears, is installed and runs
- Documentation
- Significant properties

### Representation Information (Environment description)

- Requirements for hardware, peripherals,
- Operating system, application software,
- Input and output, memory requirements and other parameters
- Documentation on installation, use and location of environment components.

## Preservation Description Information

### Reference Information

- Identifiers & descriptive information

### Context Information

- Reason for creation, relationships with other resources

### Provenance Information

- Origin of the resource & changes made due to its life in the archive

### Fixity Information

- Authentication details

## Current activity : practical experience

- The British Library
  - Digital preservation storage and management system –
    - Full metadata set : approx. 90 elements
    - Minimum set : approx. 32 elements
  - Interim system –
    - Bare essentials : 10 elements?

## **Current activity : practical experience**

- National Libraries currently implementing large scale systems (based on OAIS principles) e.g. National Library of the Netherlands (KB)
- Archives sector e.g. UKDA
- Research projects e.g. 'Cedars Guide to Preservation Metadata'

## Further research needed

- Automated preservation metadata generation
- File description details – defining and recording
- Significant properties

## Useful links

OCLC/RLG Preservation Metadata Working Group

<http://www.oclc.org/research/pmwg/>

ISO 14721:2002

CCSDS 650.0-B-1: Reference Model for an Open Archival Information System (OAIS), Blue Book. Issue 1. January 2002.

[http://ssdoo.gsfc.nasa.gov/nost/isoas/ref\\_model.html](http://ssdoo.gsfc.nasa.gov/nost/isoas/ref_model.html)

PADI: Preservation Metadata

<http://www.nla.gov.au/padi/topics/32.html>