RelatedWork

See also RelevantTechnologies

Preservation

CASPAR (Cultural, Artistic, and Scientific knowledge for Preservation, Access and Retrieval]
 CASPAR is an Integrated Project which is researching, implementing, and disseminating innovative solutions for digital preservation based on the OAIS reference model(ISO:14721:2002). The project is co-financed by the European Union within the Sixth Framework Programme (Priority IST-2005-2.5.10, "Access to and preservation of cultural and scientific resources"), that started on 1 April 2006.

DAITSS (Dark Archive In The Sunshine State)

DAITSS (Dark Archive In The Sunshine State) is a digital preservation repository application developed by the Florida Center for Library Automation. In addition to repository functions of ingest, data management and dissemination, DAITSS supports the preservation functions of format normalization, mass format migration, and migration on request.

DFDL - Grid Forum Data Format Description Language

"The aim of this working group is to define an XML-based language, the Data Format Description Language (DFDL), for describing the structure of binary and character encoded (ASCII/Unicode) files and data streams so that their format, structure, and metadata can be exposed. This effort specifically does not aim to create a generic data representation language. Rather, DFDL endeavors to describe existing formats in an actionable manner that makes the data in its current format accessible through generic mechanisms."

EAD: Encoded Archival Description

Aimed at finding aids

- Global Digital Format Registry
- CEDARS

Project work includes guide to preservation metadata

 Harvard E-journal Archive SIP format Submission Information package

Archival Information Submission Package for E-Journals

JHOVE

Tools developed by the Harvard University Library for format identification, validation, and characterization.

LOCKSS (Lots Of Copies Keeps Stuff Safe)

Based on lots of sites keeping a copy of something, and using statistical methods to 'vote' which is the 'real' copy should one or a set of copies become corrupt (or changed without authorisation)

Meta-Object Facility (MOF)

MOF is an extensible model driven integration framework for defining, manipulating and integrating metadata and data in a platform independent manner. MOF-based standards are in use for integrating tools, applications and data.

METS

Largely an XML 'wrapper' for various types of metadata and content, together with a manifest and 'structure map' allowing the relationships between content files to be indicated. Also includes a 'behaviour' section. Very flexible, so you'll probably need a profile of METS. There's a schema for representing these profiles.

• MXF

MXF is a group of standards set by SMPTE. The main format document is SMPTE377M and is the master document in the group. This defines a file format which is targeted at broadcasting, production and the content creation industry. It can carry audio, video, data, metadata and provide functionality such as EDL and playlist support.

MPEG-21 part 2 - DIDL

Set to be industrial standard, though 'non-free' (companies own IP in various areas)

- National Library of Australia: Preservation Metadata for Digital Collections
- Networked European Deposit Library (NEDLIB)
- NISO Z39.87 Metadata for Still Images

NISO standard for technical metadata for still images. Still in the draft phase, but looks very comprehensive. Related effort is NISO Metadata for Images in XML (NISO MIX)

Open Archival Information System (OAIS) reference model

De facto functional and information models

OceanStore

"OceanStore is a global persistent data store designed to scale to billions of users. It provides a consistent, highly-available, and durable storage utility atop an infrastructure comprised of untrusted servers."

- OCLC Digital Archive System Metadata Set
- OCLC/RLG Preservation Metadata Framework

Builds on the NEDLIB, NLA, CEDARS and OCLC archive work

OpenWetWare

A wiki for biological scientists and engineers. OpenWetWare seeks to encourage researchers to digitize and make freely available research materials like protocols, tutorials, courses and research summaries. It seeks to capture information that is generated and changing on short timescales.

PANIC (Preservation webservices Architecture for Newmedia and Interactive Collections)

"The goal is to provide an Integrated Preservation Framework which supports: Very large, heterogeneous, distributed collections; Multiple formats; Changing organizational needs; Which is flexible and adaptable; That supports new emerging formats, software, recommendations; Incorporates recommender: services/decision support; And is cost-effective"

PAWN – Producer Archive Workflow Network in Support of Digital Preservation

"PAWN was developed to capture the core elements required for long term preservation of digital objects as identified by previous research in the digital library and archiving communities. In fact, PAWN can be viewed as an implementation of the Ingest Process as defined by the Open Archival Information System (OAIS) Reference Model, and is currently being used to ingest significant collections into a pilot persistent archive developed through a collaboration between the San Diego Supercomputer Center, the University of Maryland, and the National Archives and Records Administration. We make use of METS (Metadata Encoding and Transmission Standards) to encapsulate content, structural, descriptive, and preservation metadata. The basic software components are based on open standards and web technologies, and hence are platform independent."

Petabyte Infrastructure Project

Project to build infrastructure based on OceanStore

- Preservation Metadata Implementation Strategies (PREMIS) activity
 - Following on from above OCLC/RLG work
- **PRONOM**

An online source for information about file formats and software products.

- RLG Working Group Recommendation
- SKOS: W3C Simple Knowledge Organization System, a standard to share thesauri and authority lists in the Semantic Web.
- TOM Typed Object Model

Essentially TOM consists of two things:

- o Á data model that describes the behaviors and representations of particular information sources (such as file formats and information retrieval services).
- A system of networked software that supports the description and use of these sources.
- Towards a Global Digital Format Registry
- Virtual Data Center

The Virtual Data Center (VDC) is an OSS digital library system "in a box" for numeric data.

XML Formatted Data Units (XFDU)

"An XML packaging standard developed by CCSDS at NASA/SDSCC - who brought us OAIS." **The draft specification from CCSDS, **a powerpoint presentation, **more info in a doc, and **some other documents

Preservation bookmarks

- Digital Preservation Coalition
 Including Preservation Management of Digital Materials a Handbook available on-line no longer in print
- Library of Congress digital preservation program
- International Internet Preservation Consortium
- DLF preservation page
- UK Public Record Office digital preservation page
- DCMI Preservation Working Group
- Koninklijke Bibliotheek (National Library of the Netherlands)/IBM study
- Open Source Software in Java(tm)