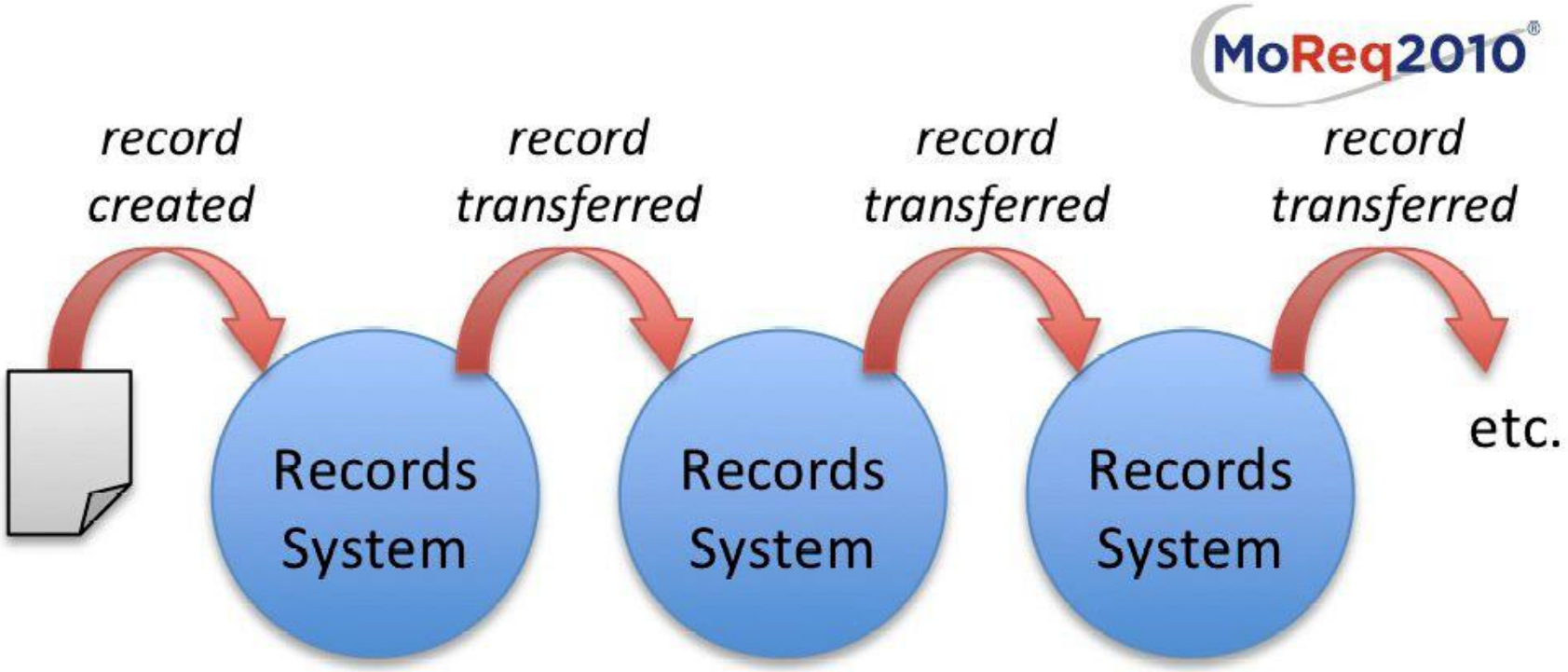


Dzisiejsze organizacje odświeżają typowo swoje zaplecze technologiczne co 3 – 5 lat. Jednak dokumenty powinny być często przechowywane znacznie dłużej. Jeżeli wymaga się od organizacji, aby przechowywała dokumenty przez 75 lat, to do końca tego okresu ona będzie przenosiła te dokumenty z jednego systemu do drugiego między 15 a 25 razy. Jeżeli każdy transfer będzie skutkował pewną utratą informacji kontekstowej o dokumentach, to wobec tego taka liczba transferów będzie mogła mieć poważny wypływ na spójność danych.

Open Archival Information System

OAIS

Open Archival Information System
historia

- 1982 The Consultative Committee for Space Data Systems (CCSDS) – forum dla narodowych agencji zainteresowanych rozwojem standardu
- 1990 porozumienie CCSDS z ISO
  - Rekomendacje CCSDS przechodzą przez procedury ISO
- 1995 propozycja CCSDS stworzenia reference model jako wynik otwartego, powtarzalnego procesu szkicowania wymagań i ich uzgadniania
  - I wersja maj 1997
  - II wersja maj 1999
  - Projekt standardu ISO – czerwic 2000
  - Zatwierdzenie modelu jako standardu ISO 14721 – styczeń 2002

Koncepcja

- *open* – prace nad modelem prowadzono w ten sposób, by każdy zainteresowany mógł w nich uczestniczyć
- *archival information system* – organizacja ludzi i systemów, którzy przyjmują na siebie odpowiedzialność za przechowanie informacji (*preserve information*) i jej udostępnianie (*provide access*) dla społeczności
  - *preserve information* – zapewnienie jej trwania w długim czasie
  - *provide access* – zapewnienie dostępu do niej w sposób zgodny z potrzebami jej pierwotnych użytkowników (twórców)

Obligatoryjne obowiązki (6), które archiwum typu-OAIS musi spełniać

1. Określenie kryteriów, jakie materiały są właściwe aby je zaliczyć do archiwalnego przechowania.
   - Przedmiot
   - Pochodzenie
   - Format
2. Posiąść wystarczające prawa do własności intelektualnej, wraz z obiektami do przechowania, tak aby móc w sposób uprawniony podejmować kroki potrzebne do właściwego przechowania.
   - Przeniesienie do nowego systemu technologicznego

Obligatoryjne obowiązki

3. Określenie zakresu w jakim wykorzystywał te informacje pierwotny użytkownik (twórca)
4. Zapewnienie, że informacja została przechowana w takiej formie, która (niezależnie od technologii) jest zrozumiała dla pierwotnych użytkowników
   - Informacja w kontekście – zapewnienie czytelności także tego kontekstu, tak aby informacja była czytelna i zrozumiała dla przyszłych pokoleń.
   - Określenie wynikających z powyższego metadanych

Obligatoryjne obowiązki

5. Opracowanie dokumentacji i procedur koniecznych do właściwego wypełnienia obowiązku przechowania
   - Mechanizmy przechowania
6. Opracowanie dokumentacji i procedur koniecznych do właściwego wypełnienia obowiązku udostępniania
   - Mechanizmy udostępniania

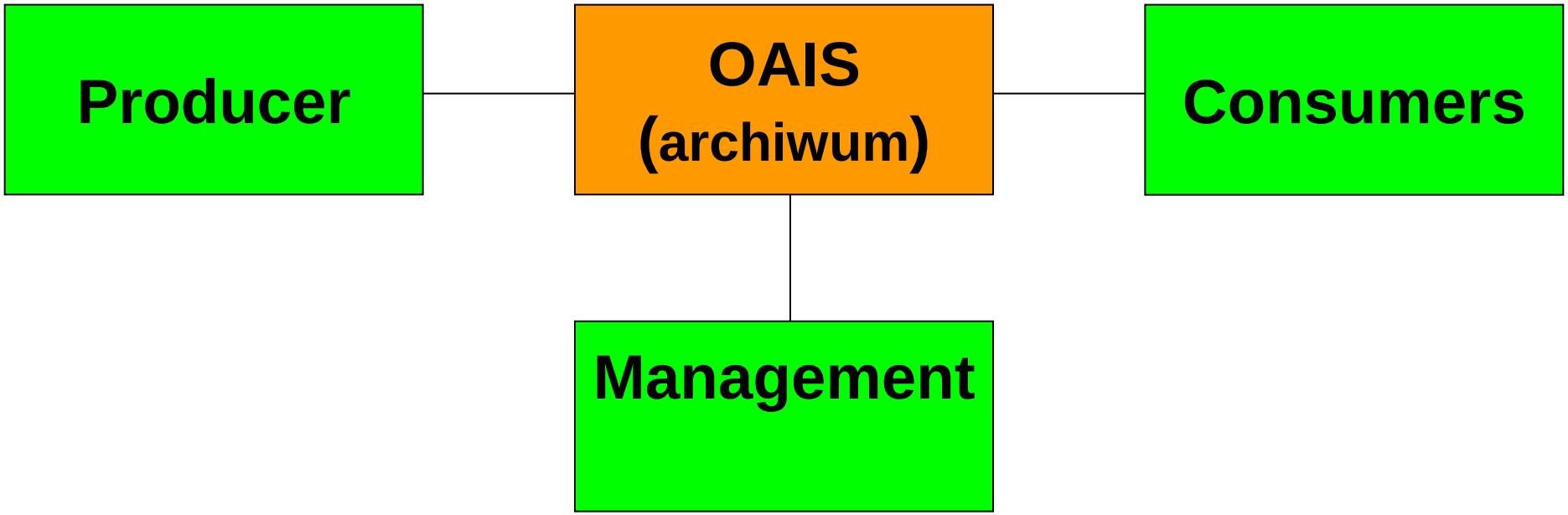
3 części modelu referencyjnego

1. *External environment* – środowisko zewnętrzne
2. *Functional components* – składniki funkcjonalne lub mechanizmy wewnętrzne
3. *Information objects* – obiekty które są ‘zaszyte’, zarządzane i rozpowszechniane

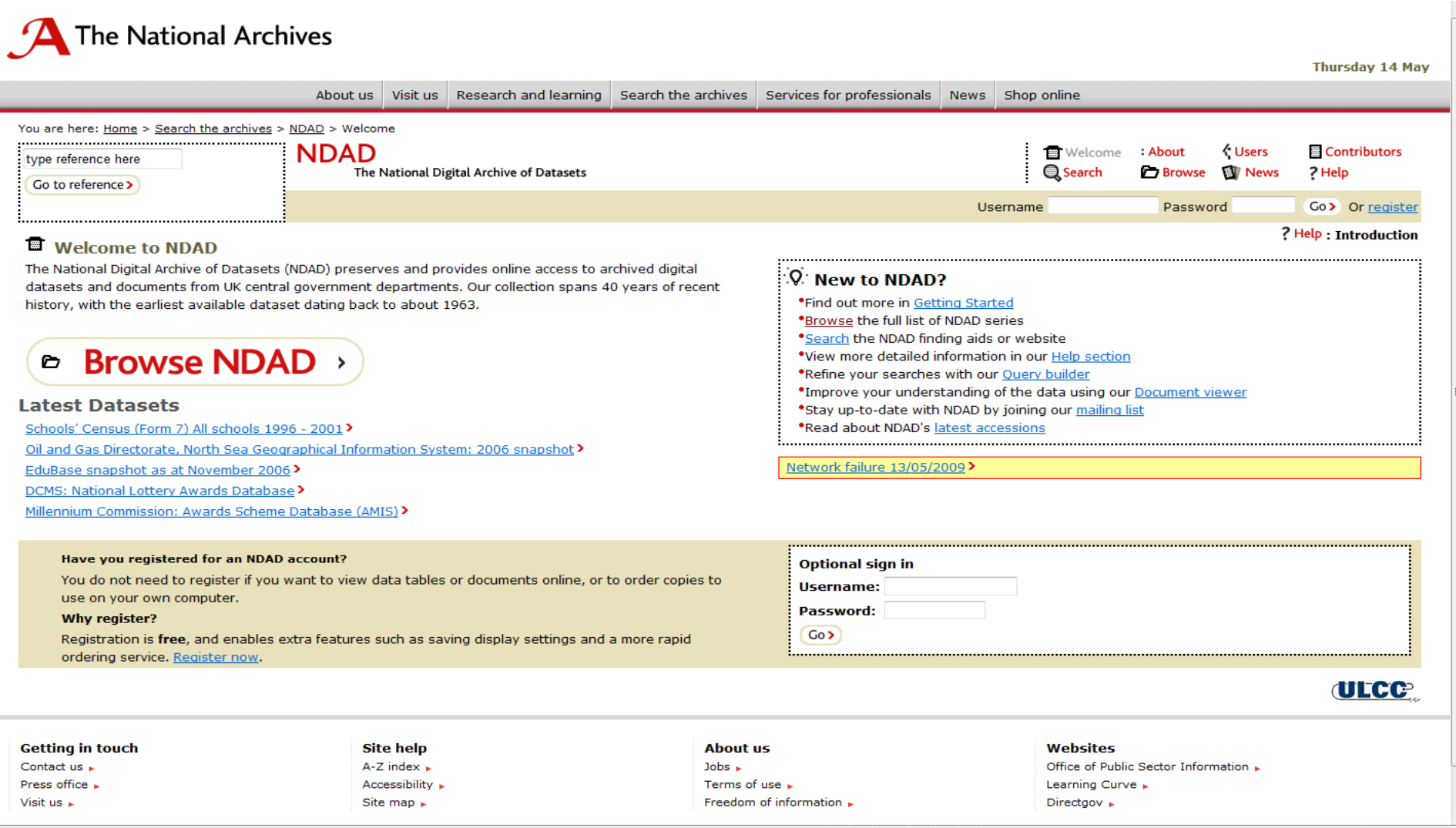
Środowisko zewnętrzne

- Management
  - Formułuje ogólne ramy działalności OAIS
    - Planowanie strategiczne
    - Źródła finansowania
    - (ale nie codzienne zarządzanie Archiwum)
- Producer (Producers): osoba, organizacja lub system przekazujące informacje + metadane do przechowania w OAIS
- Consumers: osoba, organizacja lub system korzystająca z informacji przechowywanych w OAIS

OAIS - środowisko



The National Digital Archive of Datasets (NDAD)



NDAD

- Zbiory danych z centralnych urzędów rządu UK
  - OAIS = NDR na ULCC
  - Management = TNA
  - Producers = UK gov. Departments
  - Consumers = ALL (via Web)

Department	Series title	NDAD ref	National Archives ref
Agricultural Departments	Agricultural and Horticultural Census	CRDA/4	MAF 408 MAF 410
	Bovine TB	CRDA/56	MAF 430
	Coast Protection Survey of England	CRDA/10	MAF 406
	Internal Drainage Board Database	CRDA/9	MAF 407
British Railways Board	British Rail Electronically Archived Documents	CRDA/37	AN 186
Countryside Agencies	Local Heritage Initiative project directory	CRDA/67	CA 1
	Survey of Rural Services	CRDA/30	D 10 D 16
	Vital Villages Project Database	CRDA/68	CA 2
Department of Culture, Media and Sport	Millennium Commission: Awards Scheme Database (AMIS)	CRDA/65	MM 3
	Millennium Commission: Grants Database (PROFESA)	CRDA/66	MM 4
	National Lottery Awards Database	CRDA/39	PF 1
Department of Trade and Industry	Enemy Property Claims Assessment Panel (EPCAP)	CRDA/42	NK 1
	Home and Leisure Accident Surveillance Systems	CRDA/58	NK 3
	Oil and Gas Directorate, North Sea Geographical Information System	CRDA/26	EG 17
Education Departments	Grant Maintained Schools Database	CRDA/36	ED 278
	Learning Partnerships	CRDA/53	NV 4
	Learning and Training at Work	CRDA/52	NV 3
	Register of Educational Establishments	CRDA/47	NV 2
	Schools' Census (Form 7)	CRDA/13	ED 267
English Heritage	Heritage Protection datasets	CRDA/64	WORK 93
Environment Departments	Countryside Information System	CRDA/46	AT 73
	Deeds Registry Application	CRDA/49	WORK 88
Forestry Commission	National Inventory of Woodland and Trees	CRDA/3	F 45
Health Departments	1994 General Household Survey: Follow-up Survey of the Health of People aged 65 and over	CRDA/28	JA 6
	AIDS Advertising Evaluation	CRDA/35	BN 97
	Anatomy Office - Anatomy dataset	CRDA/21	JA 3

CRDA/37

Go to reference

NDAD
The National Digital Archive of Datasets

Series details: CRDA/37

British Rail Electronically Archived Documents

Quick reference | Full details

Title	**British Rail Electronically Archived Documents**
NDAD reference	CRDA/37
National Archives reference	AN 186
Department	British Railways Board
Abstract EAD	Following the process of privatising British Rail (BR), the British Railways Board (BRB) identified the need to develop and improve its records man procedures. British Rail Electronically Archived Documents (BREAD) provides records from all business units within BR, such as contracts, leases, licences, board minutes, formal company documentation and statutory notices.
See also	• Administrative history for British Railways Board • Dataset documentation catalogue
Datasets	• 2000 snapshot • 2003 snapshot
ISAD(G) level of description	Series

Last updated

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UK Government Web Archive

A to Z
Archiving datasets
Information on web archiving
Local Government and NHS Automated Crawls Project
Other web archive collections
Removed web pages
Themed collections
Twitter archive
Video archive
Web archiving and web continuity guidance

Archiving datasets

NDAD (1997-2010)

From 1997 to 2010, The National Archives selected government datasets for archiving in the National Digital Archive of Datasets (NDAD), part of the University of London Computer Centre. Selected datasets were physically transferred from government departments, along with supporting contextual information. NDAD converted the data from its original format to the simple open CSV format in order to make the data available via the NDAD website for download or purchase as a DVD.

For more detailed information on this discontinued system, see the NDAD website which has been captured into the UK Government Web Archive http://webarchive.nationalarchives.gov.uk/20101104101827/http://www.ndad.nationalarchives.gov.uk/.

You can search for the actual data from NDAD in Discovery - our catalogue.

UK Government Web Archive (Since 2010)

The NDAD system was discontinued in 2010. The way that government publishes datasets has evolved and, as they are now made available on government websites, it is possible to capture and preserve them in the UK Government Web Archive.

Initially, we captured the datasets hosted on departments' websites at the same time that we archived the departments' websites themselves, meaning they can be accessed in the context of the government website at the time of the capture.

In December 2013, largely in response to the transition of many departmental websites to GOV.UK, our aim became to comprehensively capture all datasets listed on data.gov.uk twice per year, at the same time as our crawls of the data.gov.uk website itself. This allows the captures of the data.gov.uk website to act as a central place to access archived government datasets.

The National Archives

The UK Government Web Archive

Guidance for digital and records management teams

https://cdn.nationalarchives.gov.uk/documents/web-archiving-technical-guidance.pdf

UK Government Web Archive

We capture, preserve, and make accessible UK central government information published on the web. The web archive includes videos, tweets, images and websites dating from 1996 to present.

Search

Search the entire UK Government Web Archive.

Browse A to Z of archived websites

Find an archived website in our collection by browsing our full A-Z list.

Social media archive search

Search the entire UK Government social media archive.

Twitter archive

See tweets archived from UK Government Twitter accounts.

Video archive

Watch videos archived from UK Government YouTube accounts.

Flickr archive

View images archived from UK Government Flickr accounts.

How to use the web archive

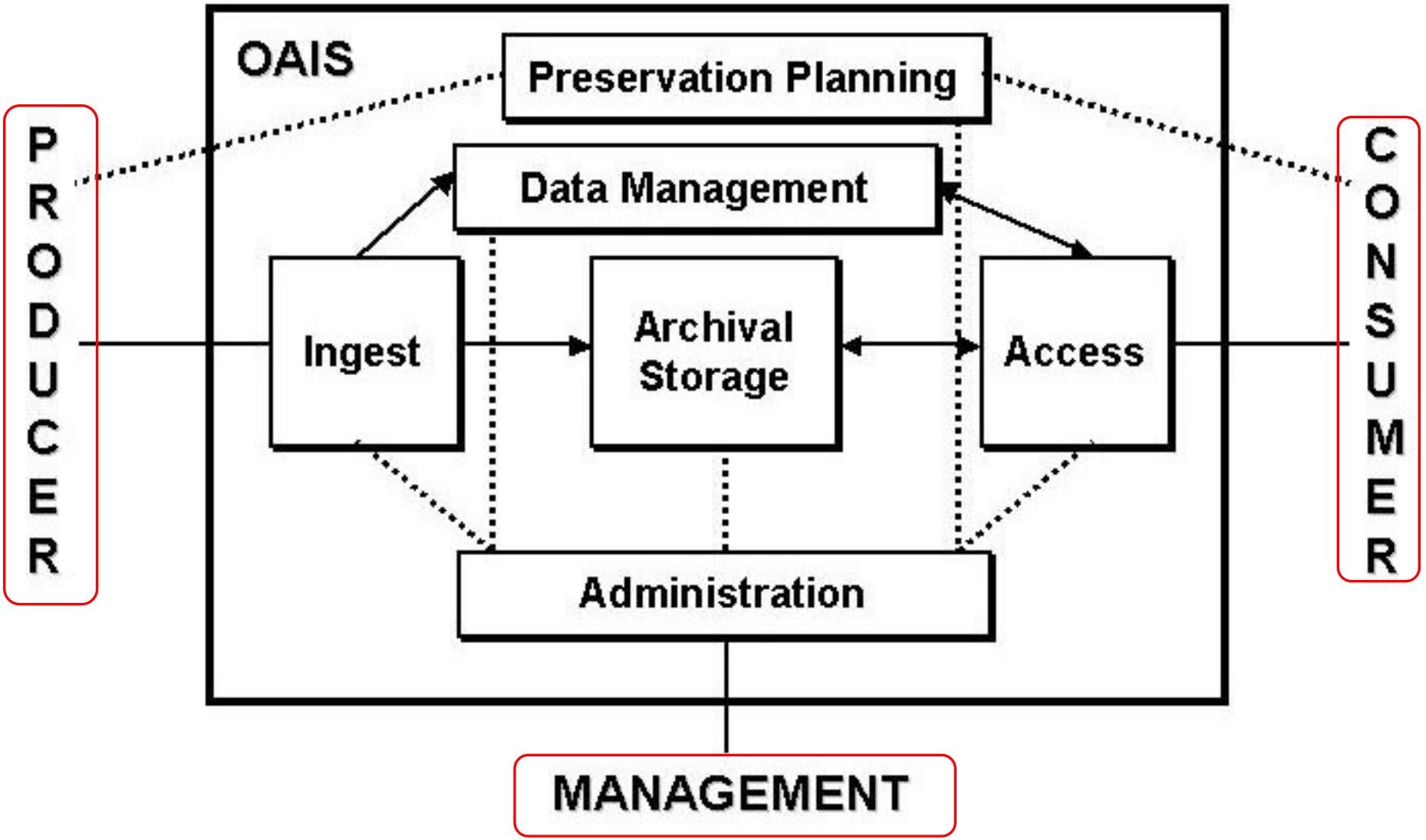
Learn more about the UK Government web archive and how to use it.

Guidance for website managers

View our technical guidance on web archiving and web continuity.

Accessibility statement

OAIS – model funkcjonalny



OAIS – model funkcjonalny

- *Ingest* – zbiór procedur odpowiedzialnych za przyjęcie z łożonej przez Producenta informacji i przygotowanie jej do włączenia do Archiwum
  - Przyjęcie
  - Walidacja
  - Przekształcenie na formę stosowana w Archiwum
  - Wydobycie i/lub stworzenia opisowych metadanych do wyszukiwania i pomocy archiwalnych
  - Przesłanie (SIP) do Archiwum

OAIS – model funkcjonalny

- *Archival Storage* – system zarządzający przechowywaniem w długim czasie i podtrzymywaniem cyfrowych obiektów powierzonych OAIS
  - Dostępność
    - Online, nearline, off-line
    - Kompletność i czytelności *bit stream*
      - *Odświeżanie nośników; migracje*
      - *Error-checking procedures*
      - *Evaluation*
      - *Disaster recovery policy*
    - *Ułatwienia wyszukiwania danych*

OAIS – model funkcjonalny

- *Data Management* – podtrzymywania baz danych z metadanymi identyfikującymi i opisującymi zarchiwizowaną informację (co umożliwia jej wyszukiwanie i tworzenie raportów) oraz danych umożliwiających administrowanie systemem (zmiana wersji)

OAIS – model funkcjonalny

- Preservation Planning - odpowiedzialny za całość strategii przechowywania
  - Monitorowanie wewnętrznego środowiska
  - Rekomendacje dotyczące zmian:
    - Systemu
    - Technologii
    - Strategii wyszukiwawczych

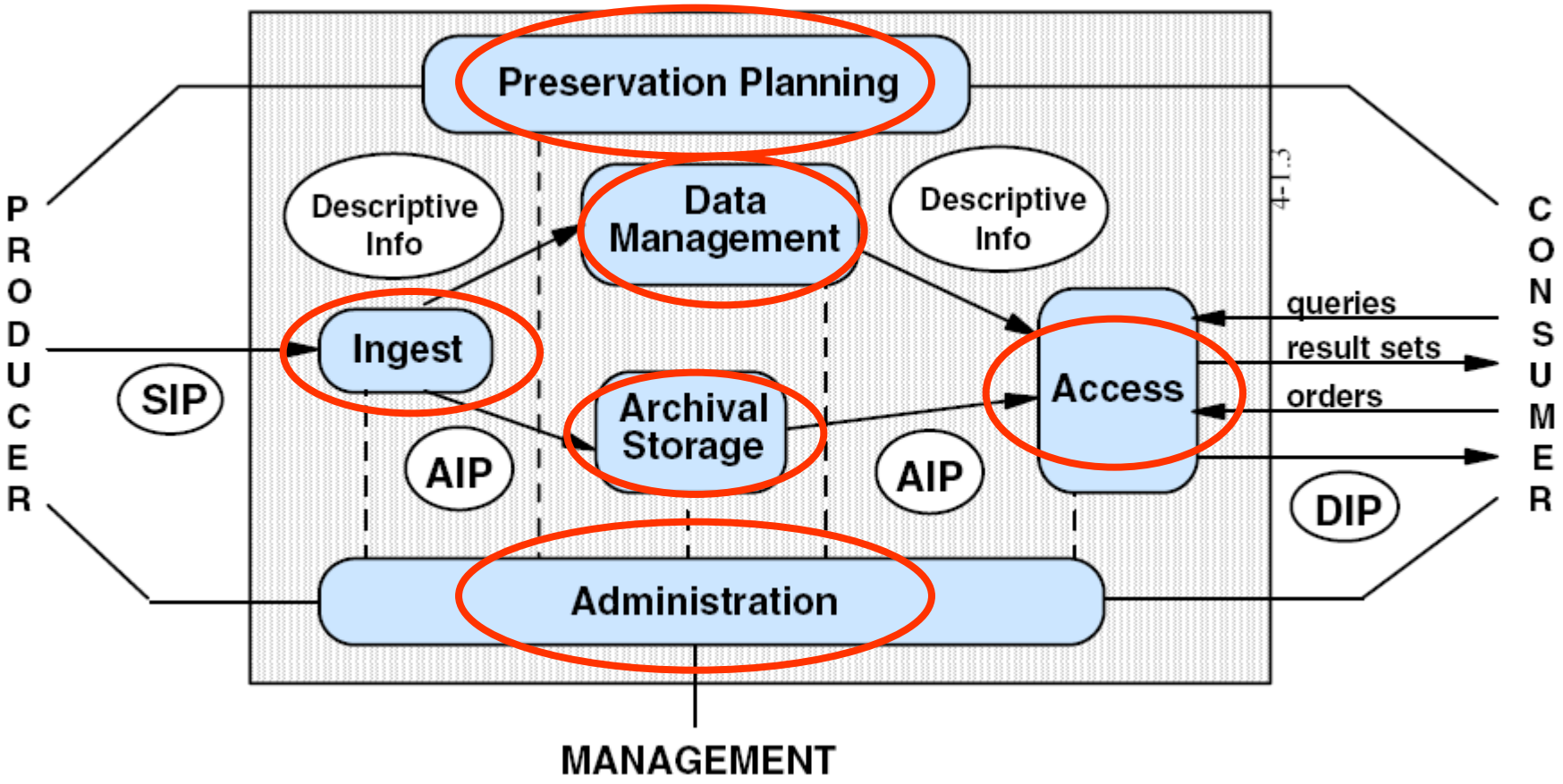
OAIS – model funkcjonalny

- Access – obsługa zapytań Consumer'a
  - Przekazywanie zapytań do **Data Management**
  - Udostępnianie wyników uzyskanych z **Archival Storage**
  - Dokonywanie koniecznych transformacji formatów
  - Mechanizmy bezpieczeństwa

OAIS – model funkcjonalny

- *Administration* – codzienne działania systemu, koordynacja współpracy pozostałych elementów
  - Zarządzanie wewnętrznymi procedurami
  - Kontakt z zewnętrznymi podmiotami (Producers, Consumers)

Functional Model



SIP=Submission Information Packages

AIP=Archival Information Packages

DIP=Dissemination Information Packages

Information packages

- Digital object
- Matadata
  - Long-term preservation
  - Access
- Sumbission Information Package (SIP)
- Archival Information Package (AIP)
- Dissemination Information Package (DIP)

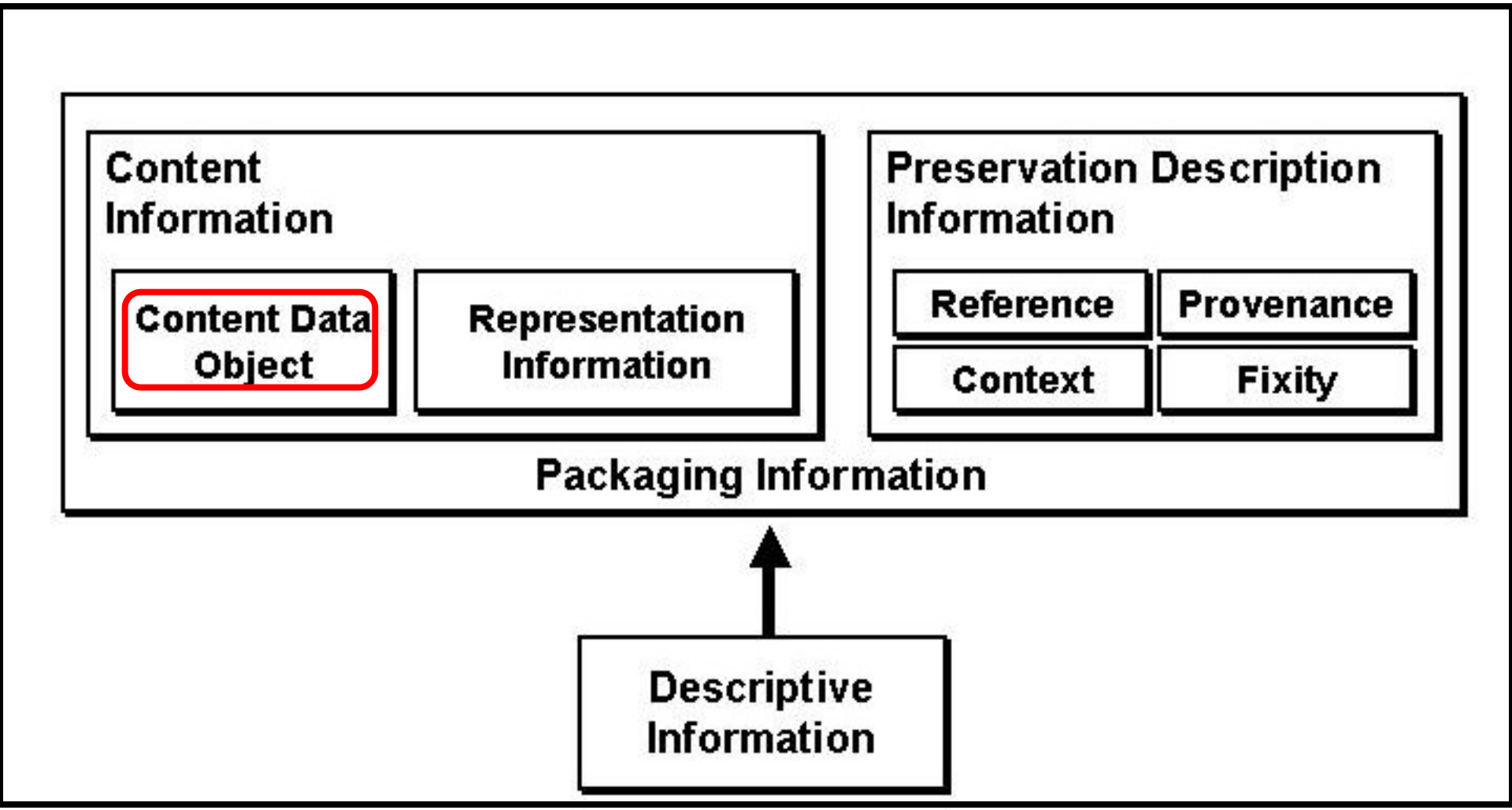
Sumbission Information Package (SIP)

- From Producer to OAIS
- Information ingested into archive
  - Forma (information may not be preserved in the **exact form** in which it is submitted)
    - Wynegocjowana z Producentem
    - *Ad hoc* (object + metadata)
  - Możliwość zmiany:
    - Formatu
    - Układu
    - Uzupełnianie matadanych (przez Producenta, przez Archiwum)

Archival Information Package (AIP)

- Stored and preserved
- Information + complet set of metadata
  - for preservation
  - for access
- Logical package
  - Nie ma wymogu wspólnej formy fizycznej
    - Może być ‘wrapper’
    - Mogą być oddzielne bazy danych:
      - informacja
      - metadane

Archival Information Package



Archival Information Package *Content Information*

- Content Data Object
  - Jeden plik lub wiele różnych plików (strony www)
    - text,
    - image,
    - video,
    - database,
    - computer program
- Representation Information
  - Opis sprzętu i oprogramowania
  - Opis zawartości (co znaczą pola, cyfry)

Archival Information Package

Preservation Description Information (PDI)

- Reference Information
  - Unikatowy identyfikator
- Context Information
  - Relacje z całością zawartości danego zespołu
- Provenance Information
  - Dzieje przechowywania i zmiany (migracje)
- Fixity Information
  - Validacja (sumy kontrolne etc.)

Archival Information Package

- Packaging Information
  - Informacje tworzące pojedynczy logiczny zestaw (package or unit) wewnątrz archiwum
- Descriptive Information
  - Pomoc wyszukiwawcza (np.: matadane DC)

Dissemination Information Package (DIP)

- Wersja dla Consumer
- Może się różnić od AIP
  - Formą
    - Np..: zamiana z TIFF na JPEG
  - Zawartością
    - Wyszukuje się i udostępnia tylko wskazaną w zapytaniu część danych
  - Towarzyszącymi metadanymi (wybór)

Making of America
Cornell University Library

About

Current online holdings:
Pages: 907,750
Monograph Volumes: 267
Serial Volumes: 955

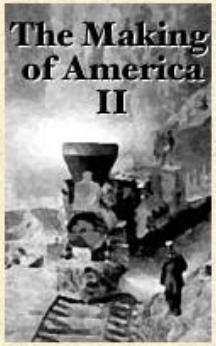
Making of America (MOA) represents a major collaborative endeavor to preserve and make accessible through digital technology a significan sources related to development of the U.S. infrastructure. With funding from The Andrew W. Mellon Foundation, MOA seeks to involve research national consortia to develop common protocols and consensus for the selection, conversion, storage, retrieval, and use of digitized materials scale.

The initial phase of the project, begun in the fall of 1995, focused on developing a collaborative effort between Cornell University and the Univ Drawing on the depth of primary materials within their respective libraries, these two institutions are developing a thematically-related digital American social history from the antebellum period through reconstruction. At Cornell University, 109 monographs (267 volumes) and 22 journa imprints primarily between 1840 - 1900 were selected, scanned, and made available through the present system. Librarians, researchers, and work together to determine the content of this digital library and to evaluate the impact of this resource on research and teaching at both inst

The University of Michigan's Making of America pages are available at: http://www.umdl.umich.edu/moa.

For more specific information about the MOA Project, see the sections below:

- MOA Collection
- Conversion Process
- Online Implementation
- MOA Future
- MOA FAQ



The Making of America II was a Digital Library Federation project to create a proposed digital library object standard by encoding defined descriptive, administrative and structural metadata, along with the primary content, inside a digital library object. The preliminary digital object "standard" that came out of the project is now itself obsolete--but served as the starting point for the development of the Metadata Encoding and Transmission Standard (METS), which is currently maintained by the Library of Congress. The original documentation leading to the development of the MOA2.DTD is maintained here for its historical interest. However, working examples of "MOA2" objects are no longer being maintained, and visitors to this site who are interested in an actively and widely used XML standard for encoding digital materials are referred to the METS website.

od 1997

A standard digital library object will promote:

- **Interoperability**

  The DTD can be used to define a transfer syntax to move digital objects between repositories, between a repository and a viewer, etc.

- **Scalability**

  A standard object encoding will allow digital library architectures to be built on scalable digital object technologies (OOD, the JAVA Enterprise Model, RMI, CORBA, etc.), as opposed to gluing a digital library together with CGI scripts and HTML

- **Digital Preservation**

  Archiving and migrating well defined objects to new technologies will certainly be easier than dealing with many proprietary encodings (e.g., Berkeley's digital object encoding for a book, Stanford's encoding, etc.)

The cornerstone of the MoA II effort an XML DTD that defines the digital object's elements and encoding. The project has also developed a relational database that allows a library to capture the metadata, a program that reads the database and automatically creates the XML encoded digital objects, a

DLF
Digital Library Federation

Providing Leadership for Libraries

Search
go Sitemap

COLLECT | PRODUCE | PRESERVE | USE | BUILD

The Digital Library Federation (DLF) is a consortium of libraries and related agencies that are pioneering the use of electronic-information technologies to extend collections and services.

DLF Aquifer News
See the new Aquifer report on metadata tools available from **here**

Organization News
DLF to continue programs in CLIR, see press release **here**

Forum News
Spring Forum 2009 presentations are now posted, available from **here**

Last updated: Wednesday, May 6, 2009

Metadata Encoding & Transmission Standard

Official Web Site

The METS schema is a standard for encoding descriptive, administrative, and structural metadata regarding objects within a digital library, expressed using the XML schema language of the World Wide Web Consortium. The standard is maintained in the Network Development and MARC Standards Office of the Library of Congress, and is being developed as an initiative of the Digital Library Federation.

TECHNICAL DOCUMENTATION

- **METS Schema & Documentation**
- **METS External Schemas**
- **METS Example Documents**
- **METS Profiles**
- **METS Implementation Registry**

COMMUNITY BUILDING

- **METS Presentations**
- **METS Suggested Reading List**
- **METS Tools & METS Compatible Software**
- **METS Events**
- **METS Editorial Board**
- **Join METS Listserv**
- **METS Listserv Archive**
- **METS Wiki**

METS NEWS

METS 1.8 Schema Now Current Version: Version 1.8 of the METS schema has moved from "candidate" to "official current version " status.
-- See Announcement

METS Editorial Board Meeting Minutes: The minutes are now available from the 2009-01-29 Board meeting teleconference:
-- See Minutes

METS Now in traditional Chinese: The METS Editorial Board is pleased to announce that the "METS Overview and Tutorial" has been translated into traditional Chinese for those who prefer it:
-- See Announcement

METS Now in Persian: Check out the translation of the "METS Overview and Tutorial" that is now available in Persian.
-- See Announcement

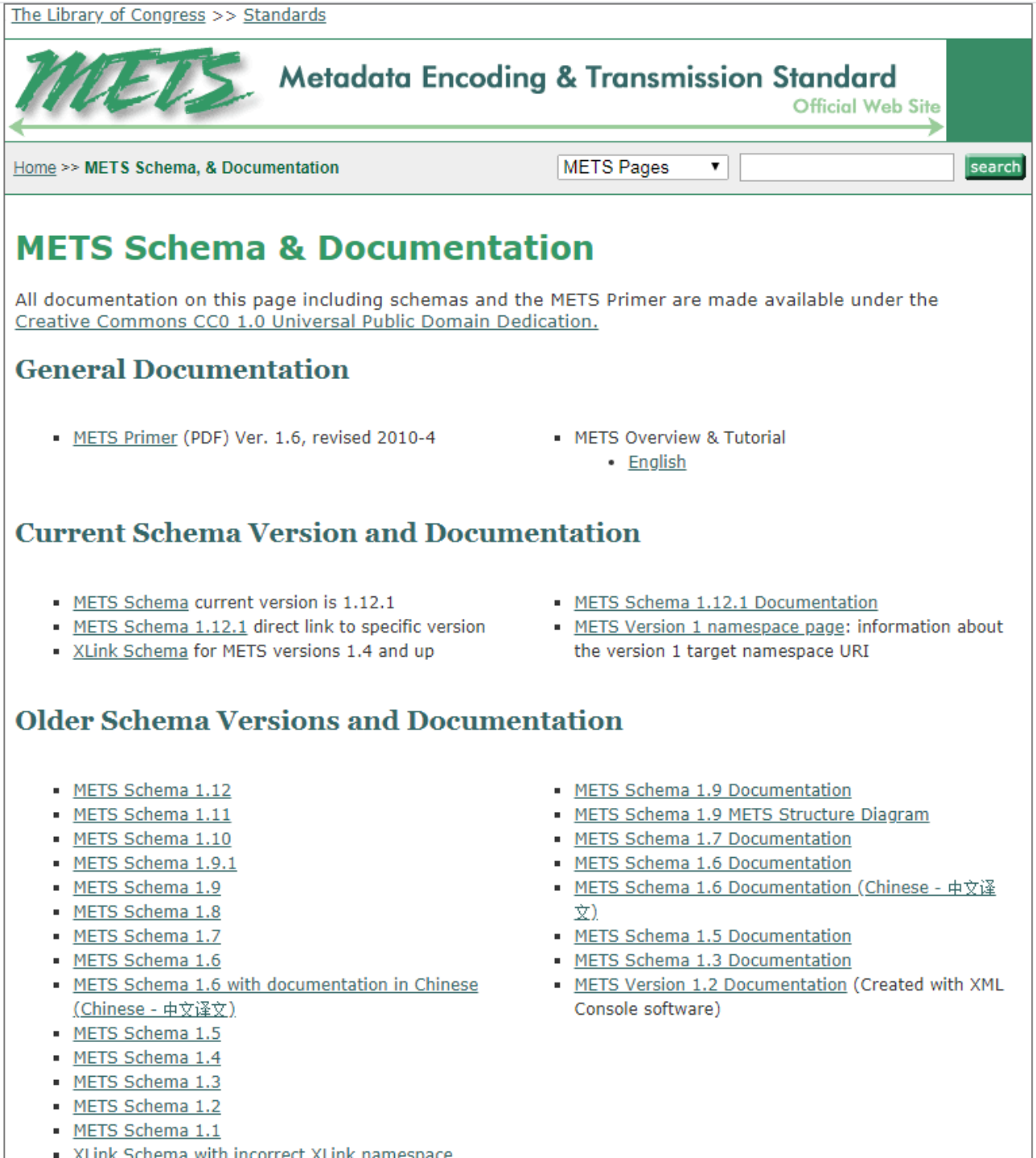
METS Registry Update: The latest edition of the METS Registry has been updated through 2009-01-21 and includes the newest contact information available.
-- See Latest METS Registry

New METS Board Members : The METS Board welcomes 4 new members to the METS Board:
-- See Announcement

METS Overview and Tutorial in Spanish: A translation of the METS Overview and Tutorial is now also available in Spanish:
-- See Announcement

METS Now in Chinese: The METS Editorial Board is very happy to announce that the METS schema documentation (v.1.6), and METS Overview/Tutorial have been translated into Chinese:
-- See Announcement

Metadata Report Published: A report has recently been issued by JISC, entitled, "Metadata for Digital Libraries: State of the Art and Future Directions."



The Library of Congress >> Standards

METS Metadata Encoding & Transmission Standard
Official Web Site

Home >> METS Schema, & Documentation

METS Pages | search

METS Schema & Documentation

All documentation on this page including schemas and the METS Primer are made available under the Creative Commons CC0 1.0 Universal Public Domain Dedication.

General Documentation

- METS Primer (PDF) Ver. 1.6, revised 2010-4
- METS Overview & Tutorial
  - English

Current Schema Version and Documentation

- METS Schema current version is 1.12.1
- METS Schema 1.12.1 direct link to specific version
- XLink Schema for METS versions 1.4 and up
- METS Schema 1.12.1 Documentation
- METS Version 1 namespace page: information about the version 1 target namespace URI

Older Schema Versions and Documentation

- METS Schema 1.12
- METS Schema 1.11
- METS Schema 1.10
- METS Schema 1.9.1
- METS Schema 1.9
- METS Schema 1.8
- METS Schema 1.7
- METS Schema 1.6
- METS Schema 1.6 with documentation in Chinese (Chinese - 中文译文)
- METS Schema 1.5
- METS Schema 1.4
- METS Schema 1.3
- METS Schema 1.2
- METS Schema 1.1
- XLink Schema with incorrect XLink namespace
- METS Schema 1.9 Documentation
- METS Schema 1.9 METS Structure Diagram
- METS Schema 1.7 Documentation
- METS Schema 1.6 Documentation
- METS Schema 1.6 Documentation (Chinese - 中文译文)
- METS Schema 1.5 Documentation
- METS Schema 1.3 Documentation
- METS Version 1.2 Documentation (Created with XML Console software)

METS NEWS

Acknowledgment: Jerome McDonough (October 01, 2021) The METS Editorial Board would like to acknowledge the significant contributions that Jerome McDonough has made to the Metadata Encoding and Transmission Standard (METS).

METS 1.12.1 – X 2019

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▼<xsd:documentation xml:lang="en">
    October 2019: Version 1.12.1 Version 1.12.1 Changes: 1. Move comments with version history to xsd:documentation elements
    This allows tools that generate documentation from schemas to include the change history in the generated documentation.
  </xsd:documentation>
 </xsd:annotation>
▼<xsd:element name="mets">
 ▼<xsd:annotation>
  ▼<xsd:documentation xml:lang="en">
     METS: Metadata Encoding and Transmission Standard. METS is intended to provide a standardized XML format for
     transmission of complex digital library objects between systems. As such, it can be seen as filling a role similar to
     that defined for the Submission Information Package (SIP), Archival Information Package (AIP) and Dissemination
     Information Package (DIP) in the Reference Model for an Open Archival Information System. The root element <mets>
     establishes the container for the information being stored and/or transmitted by the standard.
   </xsd:documentation>
  </xsd:annotation>
```

METS: Metadata Encoding and Transmission Standard. METS is intended to provide a standardized XML format for transmission of complex digital library objects between systems. As such, it can be seen as filling a role similar to that defined for the Submission Information Package (SIP), Archival Information Package (AIP) and Dissemination Information Package (DIP) in the Reference Model for an Open Archival Information System. The root element <mets> establishes the container for the information being stored and/or transmitted by the standard.

Sposób przekazywania do archiwów „long-term” obiektów cyfrowych pod postacią pakietów transferowych.

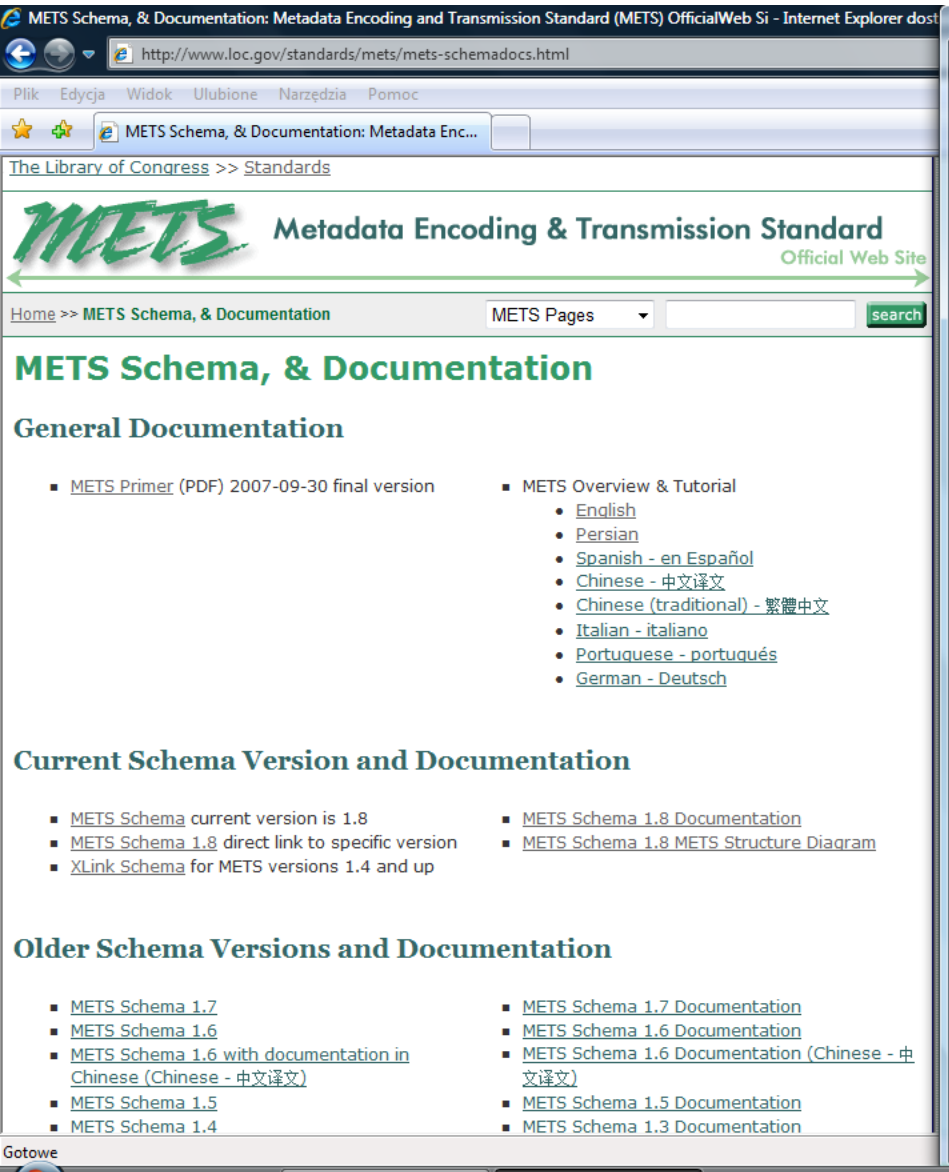
(Grzegorz Bednarek, GB Soft sp.j. wykład w BN 2017)

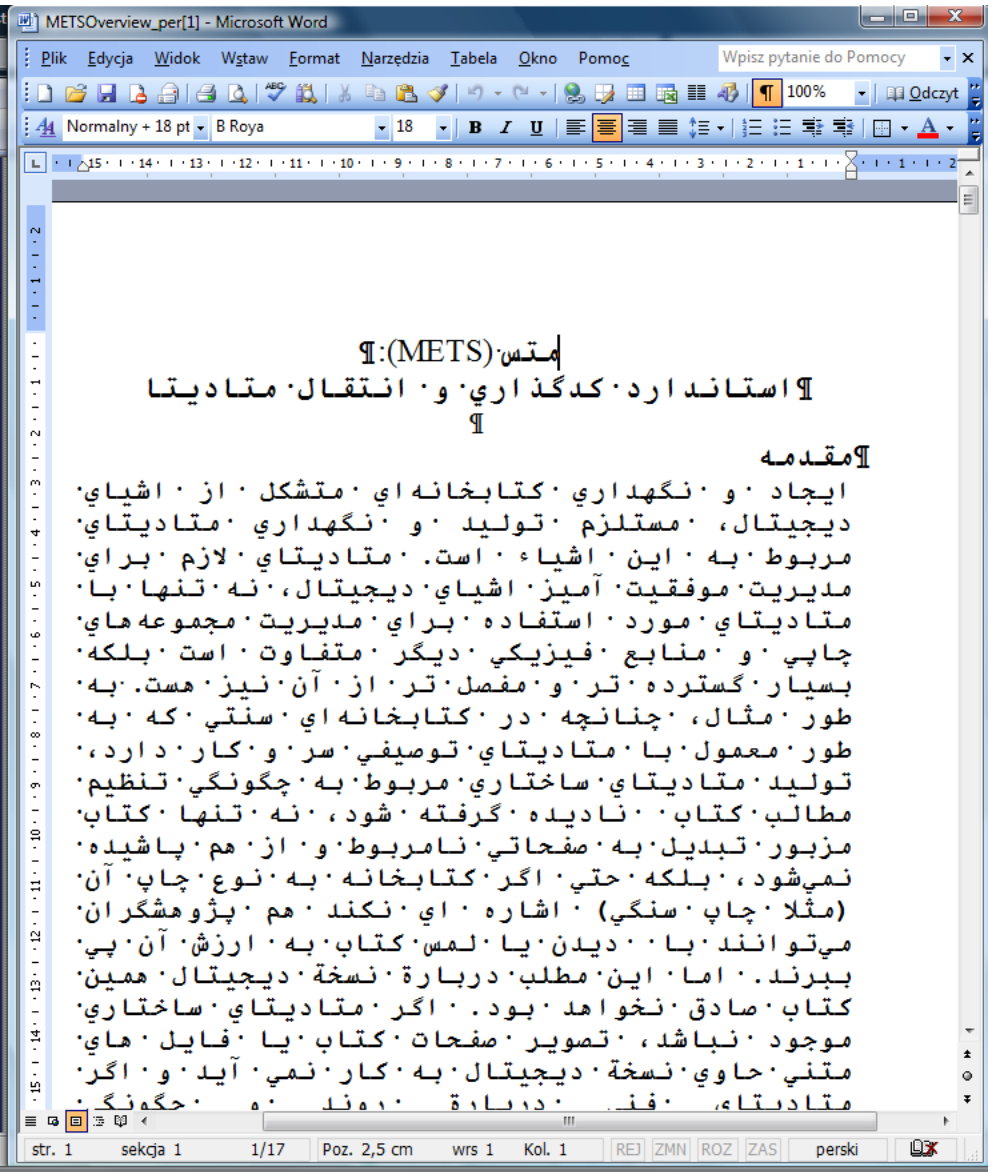
Obszary zastosowań plików METS

Dzięki plikom metadanych zewnętrznych „METS", możliwym jest :

- wspólne „opakowanie" kolejnych plików obiektów cyfrowych i powiązanych z nimi metadanych,
- przekazywanie zasobów cyfrowych pomiędzy repozytoriami o zróżnicowanej wzajemnie organizacji,
- potwierdzenia przeprowadzenia procesu digitalizacji w taki sposób, który gwarantuje, że obiekt cyfrowy może pełnić rolę kopii - bądź wprost - oryginału obiektu bibliotecznego.

BIBLIOTEKA NARODOWA


METS Schema, & Documentation: Metadata Encoding and Transmission Standard (METS) OfficialWeb Si - Internet Explorer dost
http://www.loc.gov/standards/mets/mets-schemadocs.html
Plik Edycja Widok Ulubione Narzędzia Pomoc
METS Schema, & Documentation: Metadata Enc...
The Library of Congress >> Standards
METS
Metadata Encoding & Transmission Standard
Official Web Site
Home >> METS Schema, & Documentation
METS Pages
search
METS Schema, & Documentation
General Documentation
METS Primer (PDF) 2007-09-30 final version
METS Overview & Tutorial
English
Persian
Spanish - en Español
Chinese - 中文译文
Chinese (traditional) - 繁體中文
Italian - italiano
Portuguese - português
German - Deutsch
Current Schema Version and Documentation
METS Schema current version is 1.8
METS Schema 1.8 direct link to specific version
XLink Schema for METS versions 1.4 and up
METS Schema 1.8 Documentation
METS Schema 1.8 METS Structure Diagram
Older Schema Versions and Documentation
METS Schema 1.7
METS Schema 1.6
METS Schema 1.6 with documentation in Chinese (Chinese - 中文译文)
METS Schema 1.5
METS Schema 1.4
METS Schema 1.7 Documentation
METS Schema 1.6 Documentation
METS Schema 1.6 Documentation (Chinese - 中文译文)
METS Schema 1.5 Documentation
METS Schema 1.3 Documentation
Gotowe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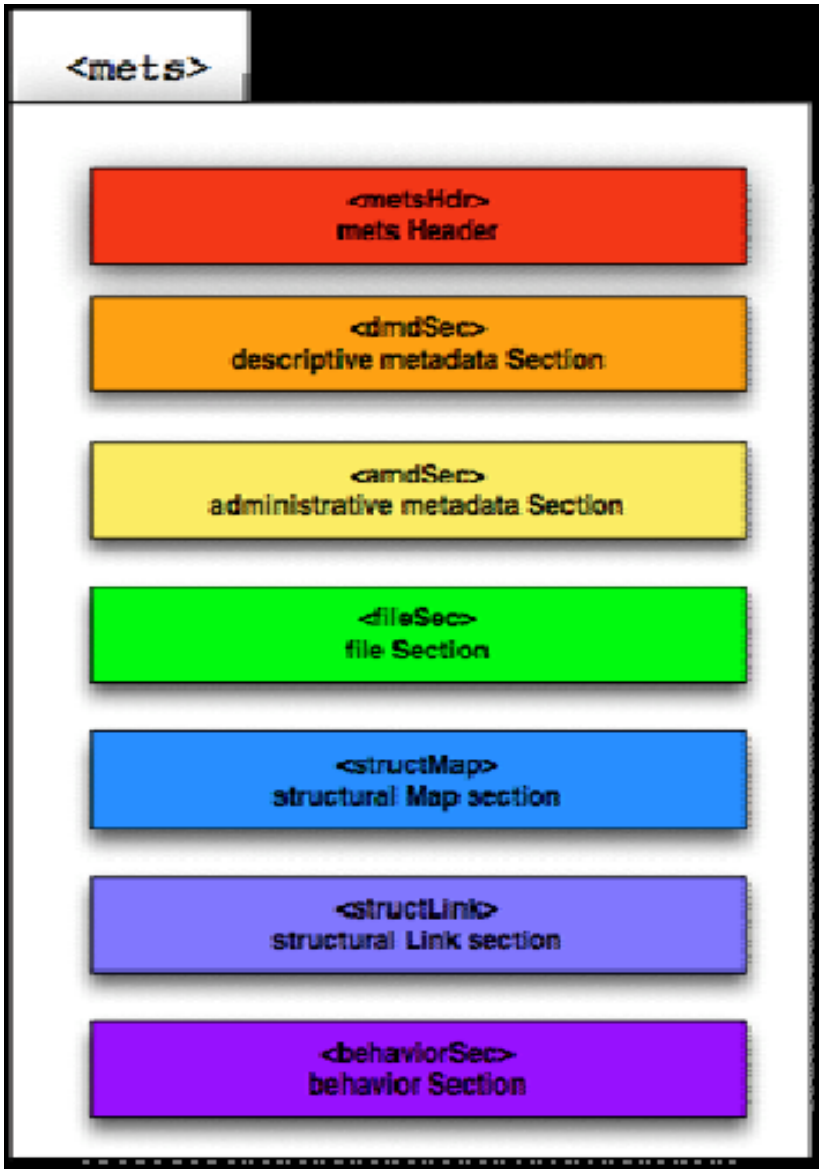
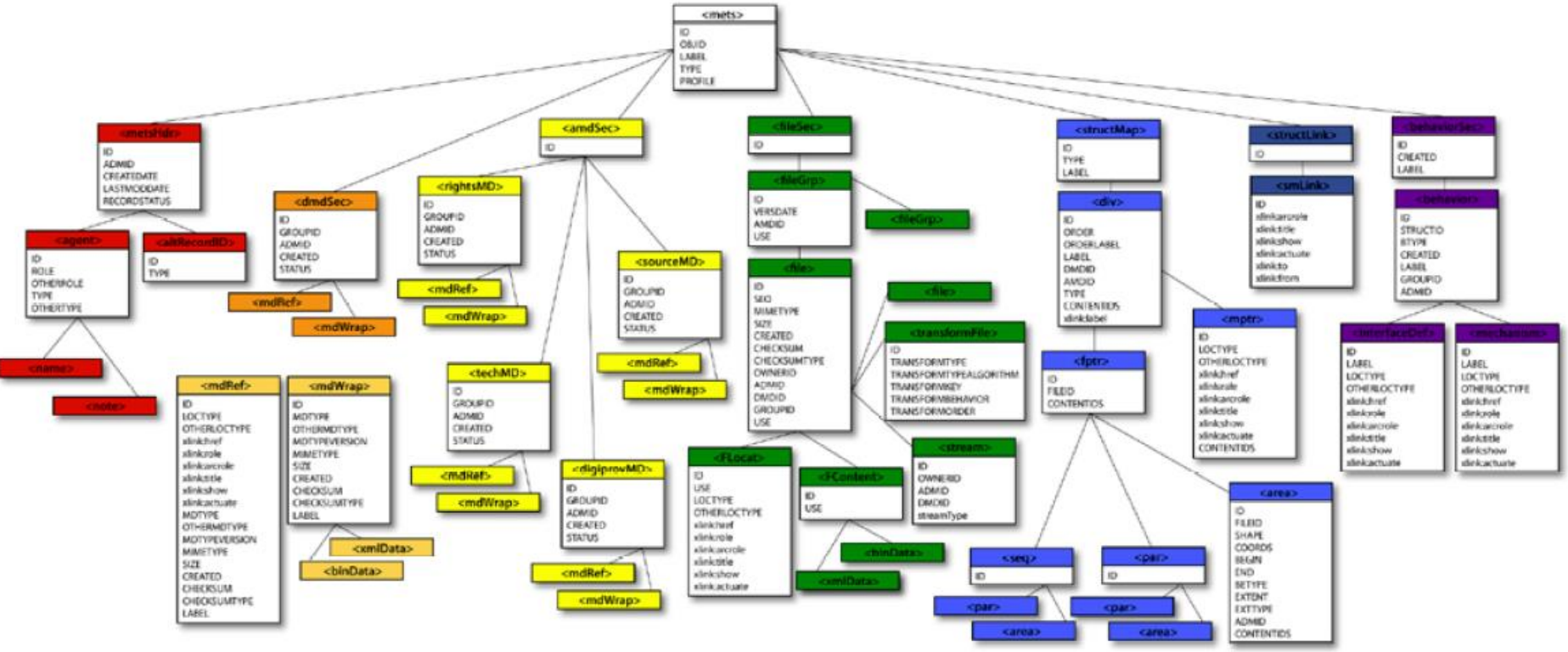
Plik Edycja Widok Wstaw Format Narzędzia Tabela Okno Pomoc
Wpisz pytanie do Pomocy
Normalny + 18 pt
B Roya
18
100%
Odczyt
متس (METS):
استاندارد کدگذاري و انتقال متادیتا
مقدمه
ایجاد و نگهداري کتابخانه اي متشکل از اشیاي دیجیتال، مستلزم تولید و نگهداري متادیتاي مربوط به این اشیاء است. متادیتاي لازم براي مدیریت موفقیت آمیز اشیاي دیجیتال، نه تنها با متادیتاي مورد استفاده براي مدیریت مجموعه هاي چاپي و منابع فیزیکي دیگر متفاوت است بلکه بسیار گسترده تر و مفصل تر از آن نیز هست. به طور مثال، چنانچه در کتابخانه اي سنتي که به طور معمول با متادیتاي توصیفي سر و کار دارد، تولید متادیتاي ساختاري مربوط به چگونگي تنظیم مطالب کتاب نادیده گرفته شود، نه تنها کتاب مزبور تبدیل به صفحاتي نامربوط و از هم پاشیده نمي‌شود، بلکه حتي اگر کتابخانه به نوع چاپ آن (مثلا چاپ سنگي) اشاره اي نکند هم پژوهشگران مي‌توانند با دیدن یا لمس کتاب به ارزش آن پي ببرند. اما این مطلب دربارة نسخة دیجیتال همین کتاب صادق نخواهد بود. اگر متادیتاي ساختاري موجود نباشد، تصویر صفحات کتاب یا فایل هاي متني حاوي نسخة دیجیتال به کار نمي آید و اگر
str. 1 sekcja 1 1/17 Poz. 2,5 cm wrs 1 Kol. 1 REJ ZMN ROZ ZAS perski
METS Schema, & D...
METSOverview_per[...
PL
08:34

METS Metadata Encoding & Transmission Standard
Official Web Site

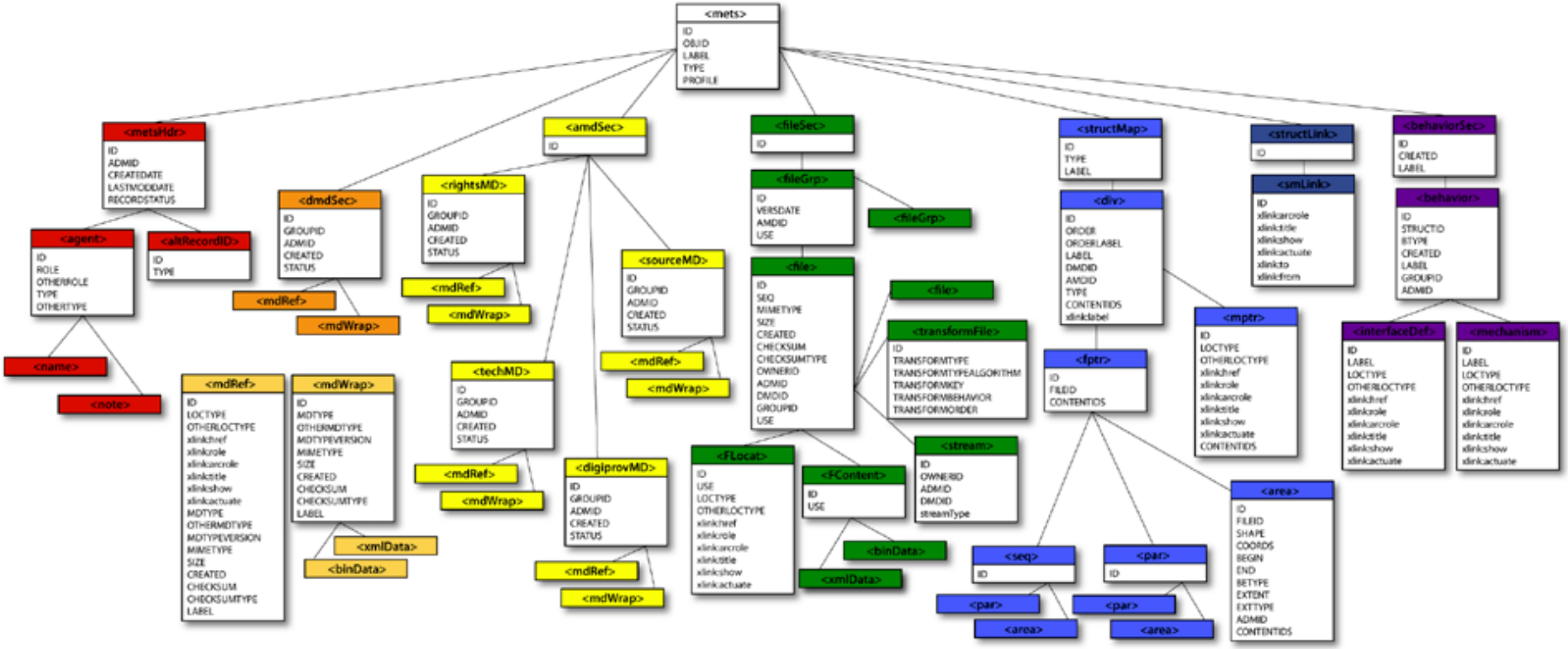


1997
v. 1.1 – VI 2001
…
v. 1.6 – VIII 2007
v. 1.8 – IV 2009
v. 1.9 – II 2010
v. 1.12 – V 2018



FOREWORD

One of the most often expressed requests received by the METS Editorial Board during its relatively short history has been for more extensive technical documentation and better examples of METS instances. As institutions which initially implemented METS have gained more experience with it, the feasibility of creating useful documentation has been greatly increased. Targeted for prospective users of METS, but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LABEL
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CREATEDATE
LASTMODDATE
RECORDSTATUS
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xlinkarcrole
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xlinkshow
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SIZE
CREATED
CHECKSUM
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SIZE
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<binData>
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<fileGrp>
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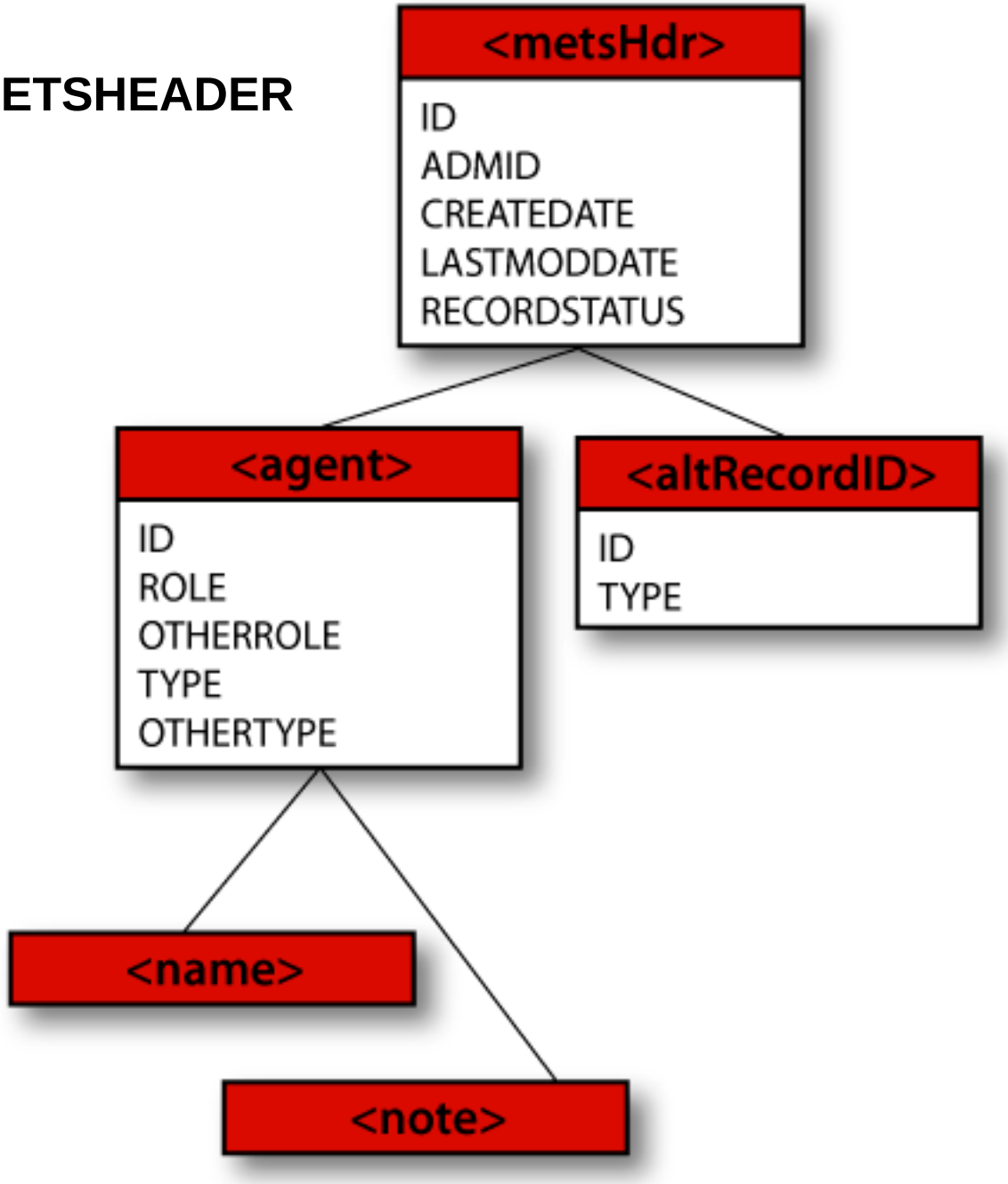
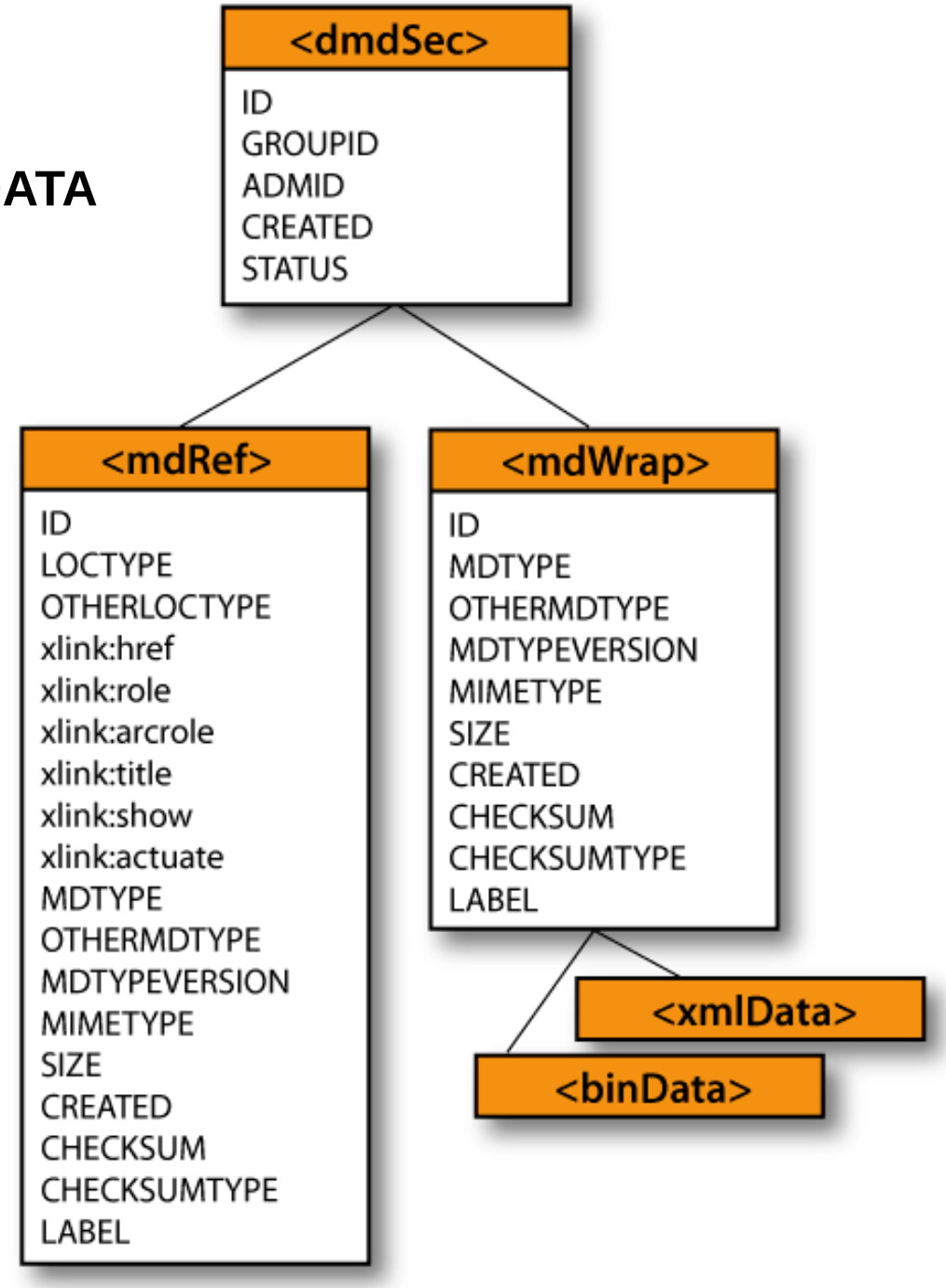
OTHERLOCTYPE
xlinkhref
xlinkrole
xlinkarcrole
xlinktitle
xlinkshow
xlinkactuate

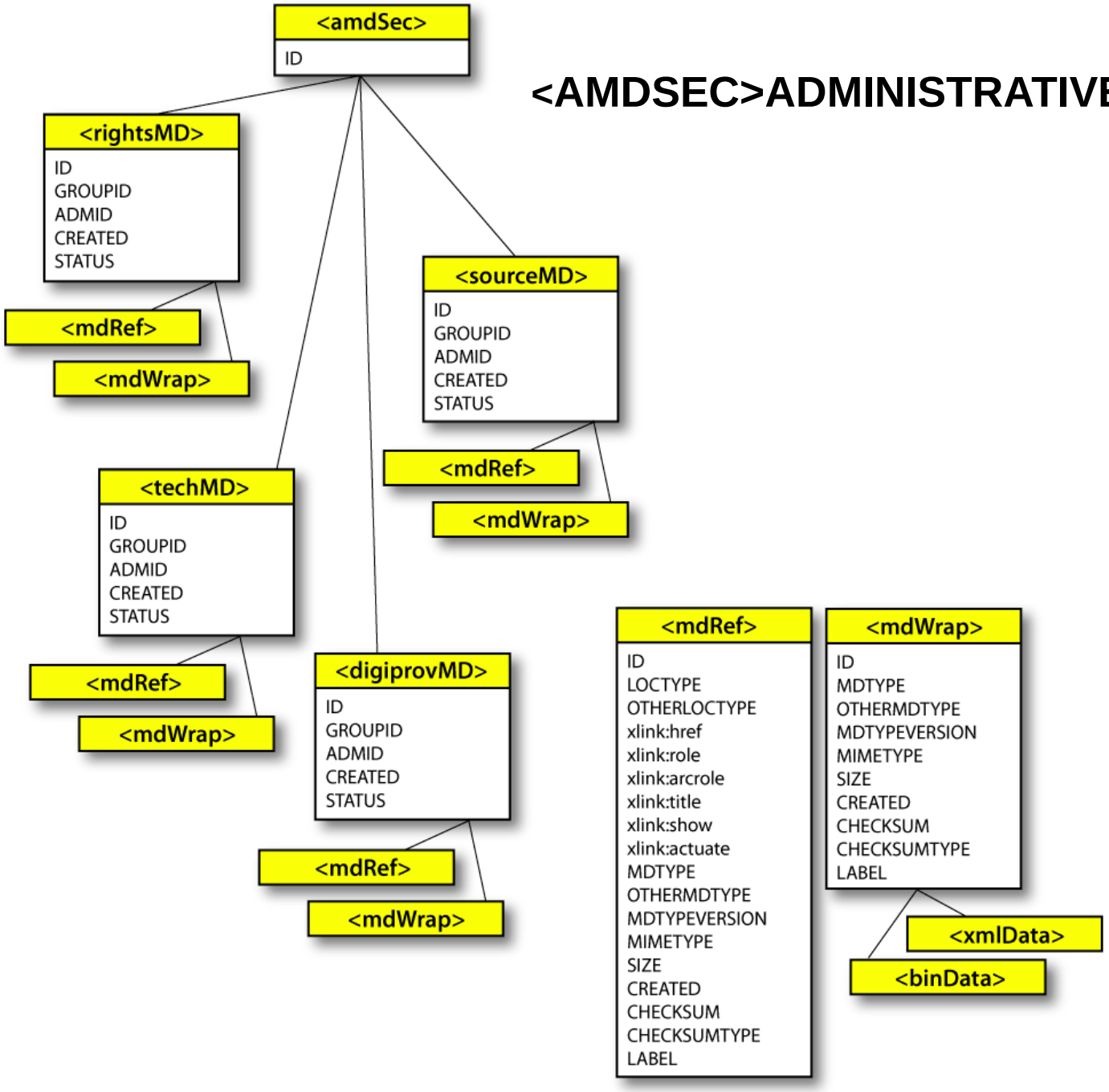
<METSHDR> METSHEADER



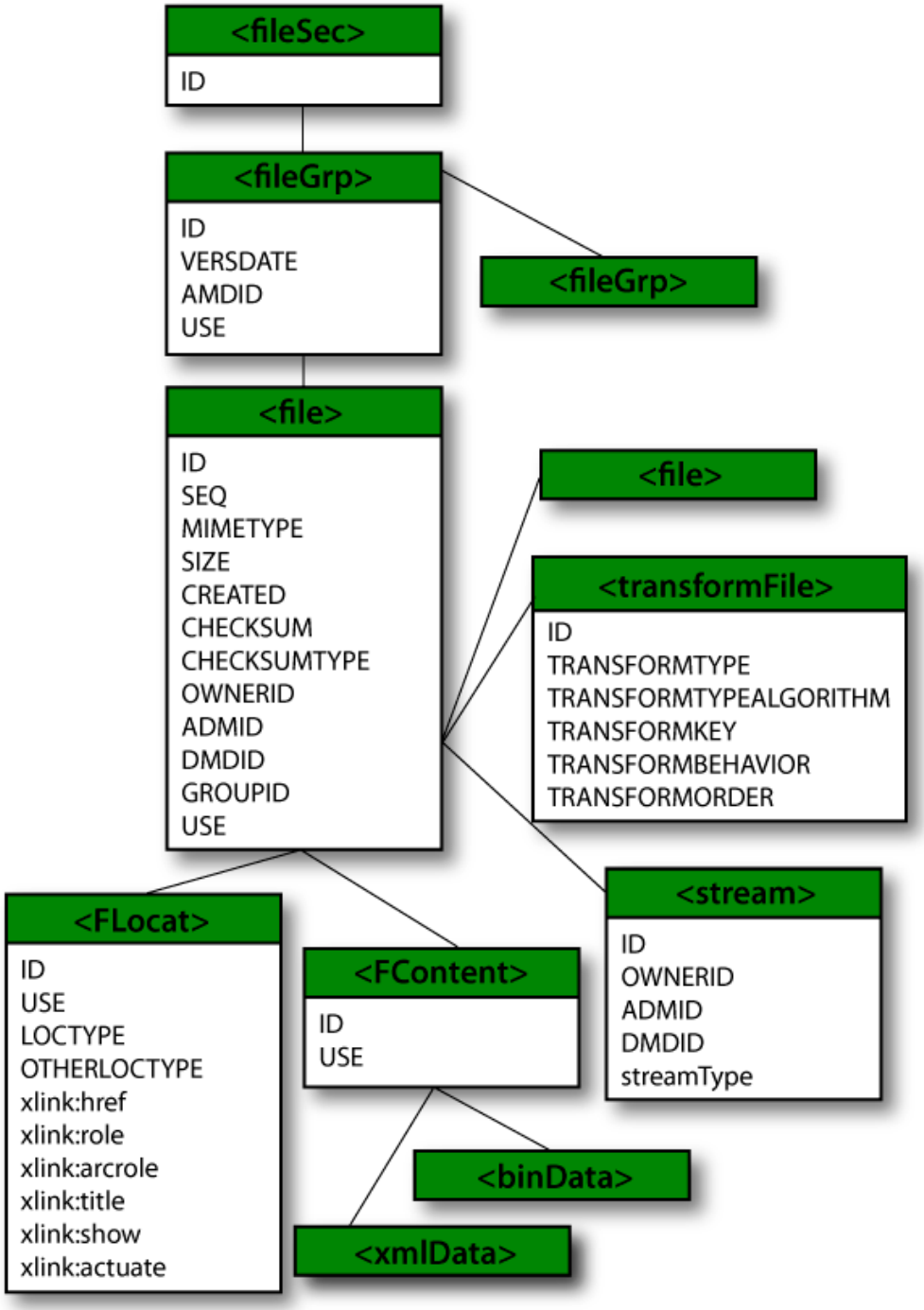
<DMDSEC> DESCRIPTIVE METADATA



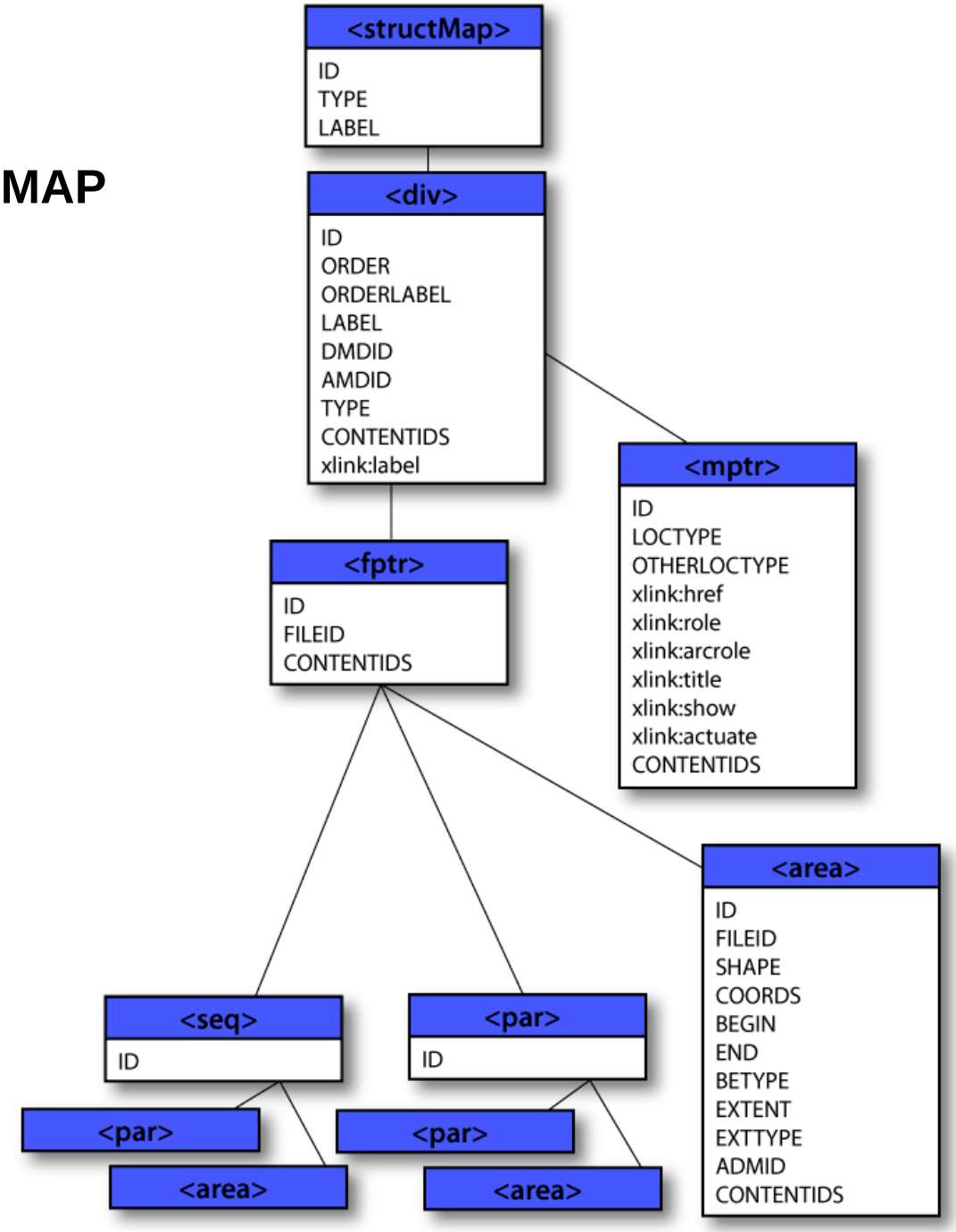
<AMDSEC>ADMINISTRATIVE METADATA

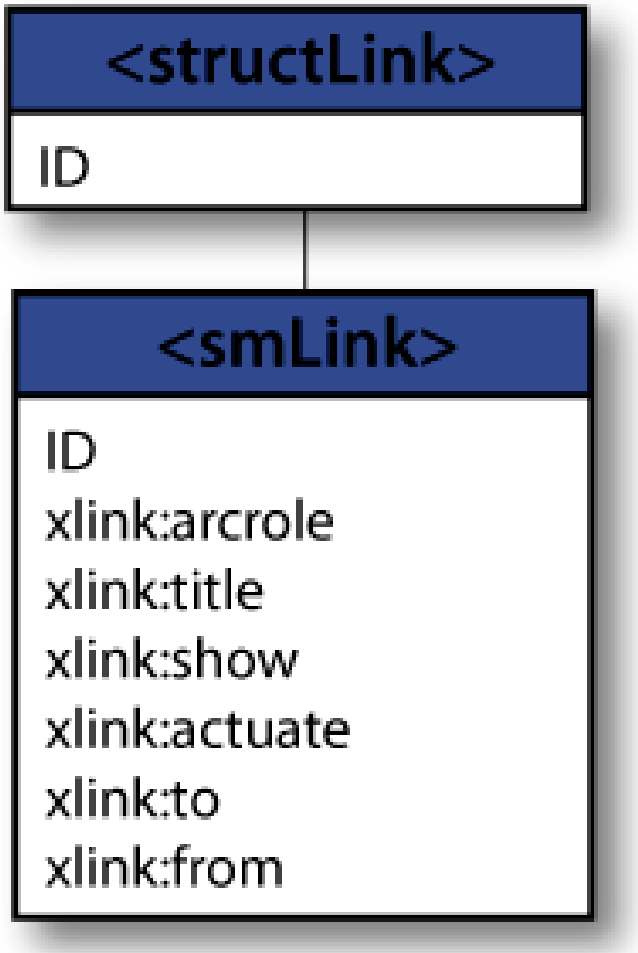


<FILE> FILE SECTION



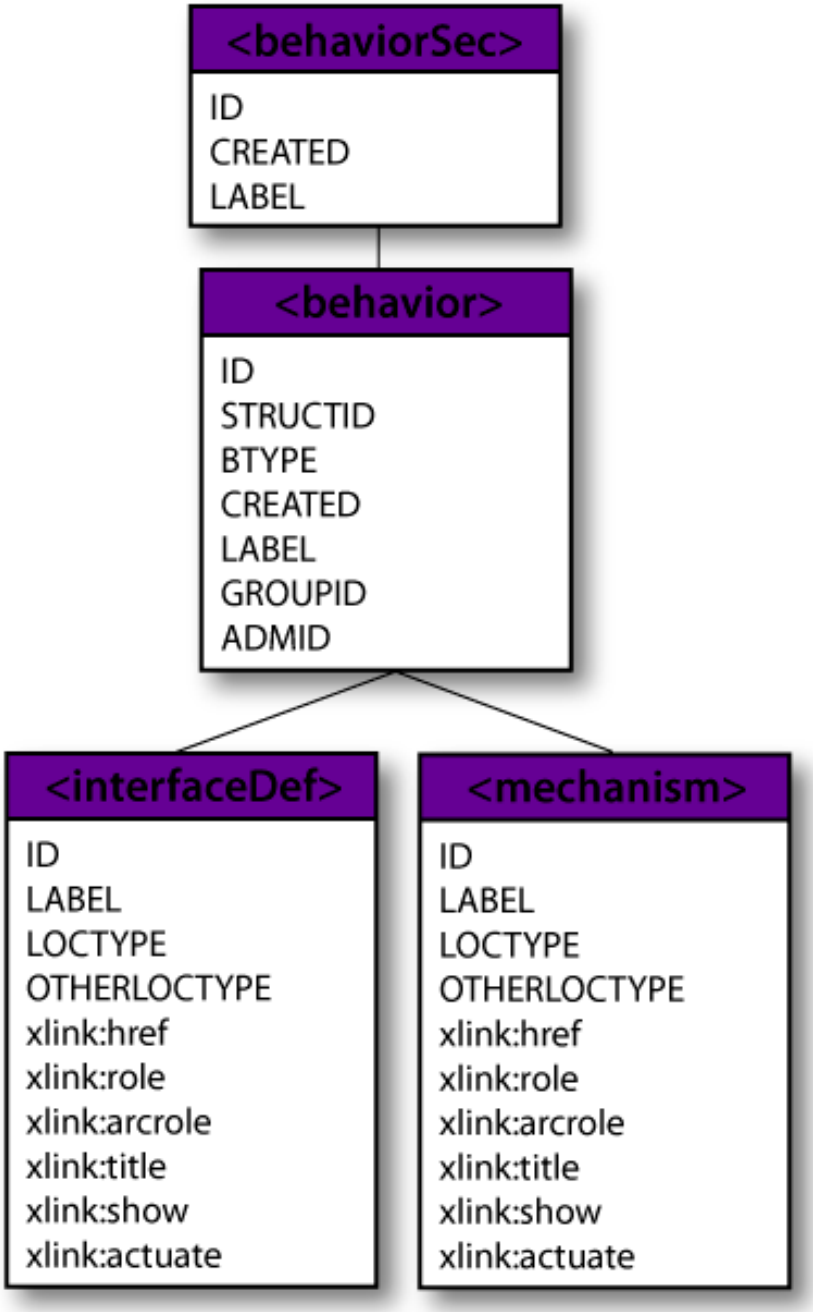
<STRUCTMAP> STRUCTURAL MAP SECTION





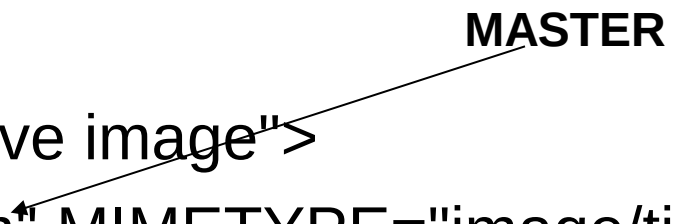
<STRUCTLINK> STRUCTURAL LINK SECTION

<BEHAVIORSEC> BEHAVIOR SECTION



- Obsługa metadanych koniecznych do
  - Zarządzania obiektami cyfrowymi w archiwum
  - Wymiany obiektów cyfrowych między archiwami (Użytkownikami)
  - Wspólny format obiektów dla
    - Information management tools/services
    - Interoperable exchange of digital materials

1. <mets:fileSec>




```
<mets:fileSec>
    <mets:fileGrp USE="archive image">
        <mets:file ID="epi01m" MIMETYPE="image/tiff">
            <mets:FLocat
        xlink:href="http://www.loc.gov/standards/mets/docgroup/full/01.tif" LOCTYPE="URL"/>
    </mets:file>
    </mets:fileGrp>
    <mets:fileGrp USE="reference image"></mets:fileGrp>
    <mets:fileGrp USE="thumbnail image"></mets:fileGrp>
</mets:fileSec>
```

File Section

```
<fileSec>
        <fileGrp ID="VERS1">
          <file ID="FILE001" MIMETYPE="application/xml" SIZE="257537" CREATED="2001-06-10">
            <FLocat LOCTYPE="URL">http://dlib.nyu.edu/tamwag/beame.xml</FLocat>
          </file>
        </fileGrp>
        <fileGrp ID="VERS2">
          <file ID="FILE002" MIMETYPE="audio/wav" SIZE="64232836"
            CREATED="2001-05-17" GROUPID="AUDIO1">
            <FLocat LOCTYPE="URL">http://dlib.nyu.edu/tamwag/beame.wav</FLocat>
          </file>
        </fileGrp>
        <fileGrp ID="VERS3" VERSDATE="2001-05-18">
          <file ID="FILE003" MIMETYPE="audio/mpeg" SIZE="8238866"
            CREATED="2001-05-18" GROUPID="AUDIO1">
            <FLocat LOCTYPE="URL">http://dlib.nyu.edu/tamwag/beame.mp3</FLocat>
          </file>
        </fileGrp>
    </fileSec>
```

2. <mets:structMap>

```
<mets:structMap TYPE="physical">
<mets:div TYPE="book" LABEL="Martial Epigrams II">
    <mets:div TYPE="page" LABEL="Blank page">
    </mets:div>
    <mets:div TYPE="page" LABEL="Page i: Half title page">
    </mets:div>
                    […]
    <mets:div TYPE="page" LABEL="Page 4 (Latin)">
    </mets:div>
    <mets:div TYPE="page" LABEL="Page 5 (English)">
    </mets:div>
</mets:div>
</mets:structMap>
```

Tu struktura fizyczna’ ale może też być logiczna: rozdziały, akapity etc.

Structural Map

```
<structMap TYPE="logical">
<div ID="div1" LABEL="Oral History: Mayor Abraham Beame"  TYPE="oral history">
<div ID="div1.1" LABEL="Interviewer Introduction"  ORDER="1">
<fptr FILEID="FILE001">
<area FILEID="FILE001" BEGIN="INTVWBG" END="INTVWND"  BETYPE="IDREF" />
</fptr>
<fptr FILEID="FILE002">
<area FILEID="FILE002" BEGIN="00:00:00" END="00:01:47" BETYPE="TIME" />
</fptr>
<fptr FILEID="FILE003">
<area FILEID="FILE003" BEGIN="00:00:00" END="00:01:47" BETYPE="TIME" />
</fptr>
 </div>
        <div ID="div1.2" LABEL="Family History" ORDER="2">
        <fptr FILEID="FILE001">
          <area FILEID="FILE001" BEGIN="FHBG" END="FHND" BETYPE="IDREF" />
        </fptr>
        <fptr FILEID="FILE002">
          <area FILEID="FILE002" BEGIN="00:01:48"END="00:06:17" BETYPE="TIME" />
        </fptr>
        <fptr FILEID="FILE003">
          <area FILEID="FILE003" BEGIN="00:01:48" END="00:06:17" BETYPE="TIME" />
        </fptr>
         </div>
<div ID="div1.3" LABEL="Introduction to Teachers' Union" ORDER="3">
<fptr FILEID="FILE001">
 <area FILEID="FILE001" BEGIN="TUBG" END="TUND" BETYPE="IDREF" />
</fptr>
<fptr FILEID="FILE002">
<area FILEID="FILE002" BEGIN="00:06:18" END="00:10:03" BETYPE="TIME" />
</fptr>
<fptr FILEID="FILE003">
<area FILEID="FILE003" BEGIN="00:06:18" END="00:10:03" BETYPE="TIME" />
</fptr>
 </div>
</div>
 </structMap>
```

3. <dmdSec>
Descriptive Metadata

- Dane potrzebne przy wyszukiwaniu informacji
- **External Descriptive Metadata (mdRef):**

```
<dmdSec ID="dmd001">
<mdRef LOCTYPE="URN" MIMETYPE="application/xml"
   MDTYPE="EAD"
 LABEL="Berol Collection Finding Aid">urn:x-
   nyu:fales1735</mdRef>
 </dmdSec>
```

Internal Descriptive Metadata

```
<dmdSec ID="dmd002">
    <mdWrap MIMETYPE="text/xml" MDTYPE="DC" LABEL="Dublin Core Metadata">
      <xmlData>
        <dc:title>Alice's Adventures in Wonderland</dc:title>
        <dc:creator>Lewis Carroll</dc:creator>
        <dc:date>between 1872 and 1890</dc:date>
        <dc:publisher>McCloughlin Brothers</dc:publisher>
        <dc:type>text</dc:type>
      </xmlData>
    </mdWrap>
    </dmdSec>

    <dmdSec ID="dmd003">
    <mdWrap MIMETYPE="application/marc" MDTYPE="MARC" LABEL="OPAC Record">
      <binData>MDI0ODdjam0gIDIyMDA1ODkgYSA0NU0wMDAxMDA...(etc.)
      </binData>
    </mdWrap>
    </dmdSec>
```

- <mdWrap> typ danych w ‘pojemniku’
  - <binData>
  - <xmlData>

```
<mets:mets> <mets:dmdSec ID="DMD1">
<mets:mdWrap MIMETYPE="text/xml" MDTYPE="MODS">
<mets:xmlData>
        <mods:mods version="3.1"> <mods:titleInfo>
        <mods:title>Epigrams</mods:title>
        </mods:titleInfo>
        <mods:name type="personal">
        <mods:namePart>Martial</mods:namePart>
        </mods:name>
        <mods:name type="personal">
        <mods:namePart>Ker, Walter C. A. (Walter Charles Alan),1853-1929
        </mods:namePart>
        </mods:name>
        <mods:typeOfResource>text</mods:typeOfResource>
        </mods:mods>
</mets:xmlData>
</mets:mdWrap>
</mets:dmdSec>
<mets:fileSec>
</mets:fileSec>
<mets:structMap>
</mets:structMap>
</mets:mets>
```

Metadata Object Description Schema (MODS)

4. <amdSec>
Administrative Metadata

- <amdSec>
  - <techMD>
  - <rightsMD>
  - <sourceMD>
  - <digiprovMD>

```
<techMD ID="AMD001">
    <mdWrap MIMETYPE="text/xml" MDTYPE="NISOIMG" LABEL="NISO
    Img. Data">
      <xmlData>
        <niso:MIMEtype>image/tiff</niso:MIMEtype>
        <niso:Compression>LZW</niso:Compression>
        <niso:PhotometricInterpretation>8</niso:PhotometricInterpretation>
        <niso:Orientation>1</niso:Orientation>
        <niso:ScanningAgency>NYU Press</niso:ScanningAgency>
      </xmlData>
    </mdWrap>
     </techMD>
```

National Information Standards Organization

5. <metsHdr> METS Header

```
<metsHdr CREATEDATE="2003-07-04T15:00:00"
   RECORDSTATUS="Complete">
   <agent ROLE="CREATOR"
   TYPE="INDIVIDUAL">
     <name>Jerome McDonough</name>
   </agent>
   <agent ROLE="ARCHIVIST"
   TYPE="INDIVIDUAL">
     <name>Ann Butler</name>
   </agent>
</metsHdr>
```

<smLink>

Structural Links

- Określa związki między elementami struktury plików dołączonych

```
<smLink from="IMG1" to="P2"
   xlink:title="Hyperlink from
      JPEG Image on Page 1 to Page 2"
   xlink:show="new"
      xlink:actuate="onRequest" />
```

<behaviorSec>
Behavior Section

<METS:behavior ID="DISS1.1" STRUCTID="S1.1"
BTYPE="uva-bdef:stdImage" CREATED="2002-05-25T08:32:00" LABEL="UVA Std Image Disseminator" GROUPID="DISS1" DMID="AUDREC1">

<METS:interfaceDef LABEL="UVA Standard Image Behavior Definition" LOCTYPE="URN" xlink:href="uva-bdef:stdImage"/>

<METS:mechanism LABEL="A NEW AND IMPROVED Image Mechanism" LOCTYPE="URN" xlink:href="uva-bmech:BETTER-imageMech"/>

</METS:behavior>

Technical Metadata for Layout and Text Objects

Structure of ALTO Files

An ALTO file consists of three major sections as children of the root <alto> element:

- <Description>
- <Styles>
- <Layout>

The <Description> section contains metadata about the ALTO file itself and processing information on how the file was created.

The <Styles> section contains the text and paragraph styles with their individual descriptions:

- <TextStyle> has font descriptions
- <ParagraphStyle> has paragraph descriptions, e.g. alignment information

The <Layout> section contains the content information. It is subdivided into <Page> elements.

A page consists of margins and printspace, all of those are non-intersection rectangular areas within the page area. Each of these can contain any number of objects like lines, images or textblocks and more. A textblock is divided into textlines and those are divided furthermore in strings and spaces.

The global structure of the ALTO file is as follows:

```
<alto>
    <Description>
        <MeasurementUnit/>
        <sourceImageInformation/>
        <Processing/>
    </Description>
    <Styles>
        <TextStyle/>
        <ParagraphStyle/>
    </Styles>
    <Layout>
        <Page>
            <TopMargin/>
            <LeftMargin/>
            <RightMargin/>
            <BottomMargin/>
            <PrintSpace/>
        </Page>
    </Layout>
</alto>
```

News

- Schema Version 4.1 released
  2019-05-07
- Schema Version 4.0 released
  2018-04-11
- Schema Version 3.1 released
  2016-01-25
- Schema Version 3.0 released (version 2.2 renamed)
  2014-08-25
- Schema Version 2.2 Draft Released
  2014-07-08
- Schema Version 2.1 Officially Released
  2014-02-23
- Schema Version 2.1 Draft Released
  2014-01-23

Schema

- Current version (4.0)

Listserv

- Subscribe, archives


```
<alto>
    <Description>
        <MeasurementUnit/>
        <sourceImageInformation/>
        <Processing/>
    </Description>
    <Styles>
        <TextStyle/>
        <ParagraphStyle/>
    </Styles>
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        </Page>
    </Layout>
</alto>
```

The following schemas have been endorsed by the METS Editorial Board for use with METS

Descriptive Metadata (to co można dołączyć z zewnątrz)

- Dublin Core
  - Dublin Core Metadata Initiative
- Metadata Object Description Schema (MODS)
  - MODS Website
- MARCXML MARC 21 Schema (MARCXML)
  - MARCXML Website
- VRA Core
  - VRA Core 4 Website

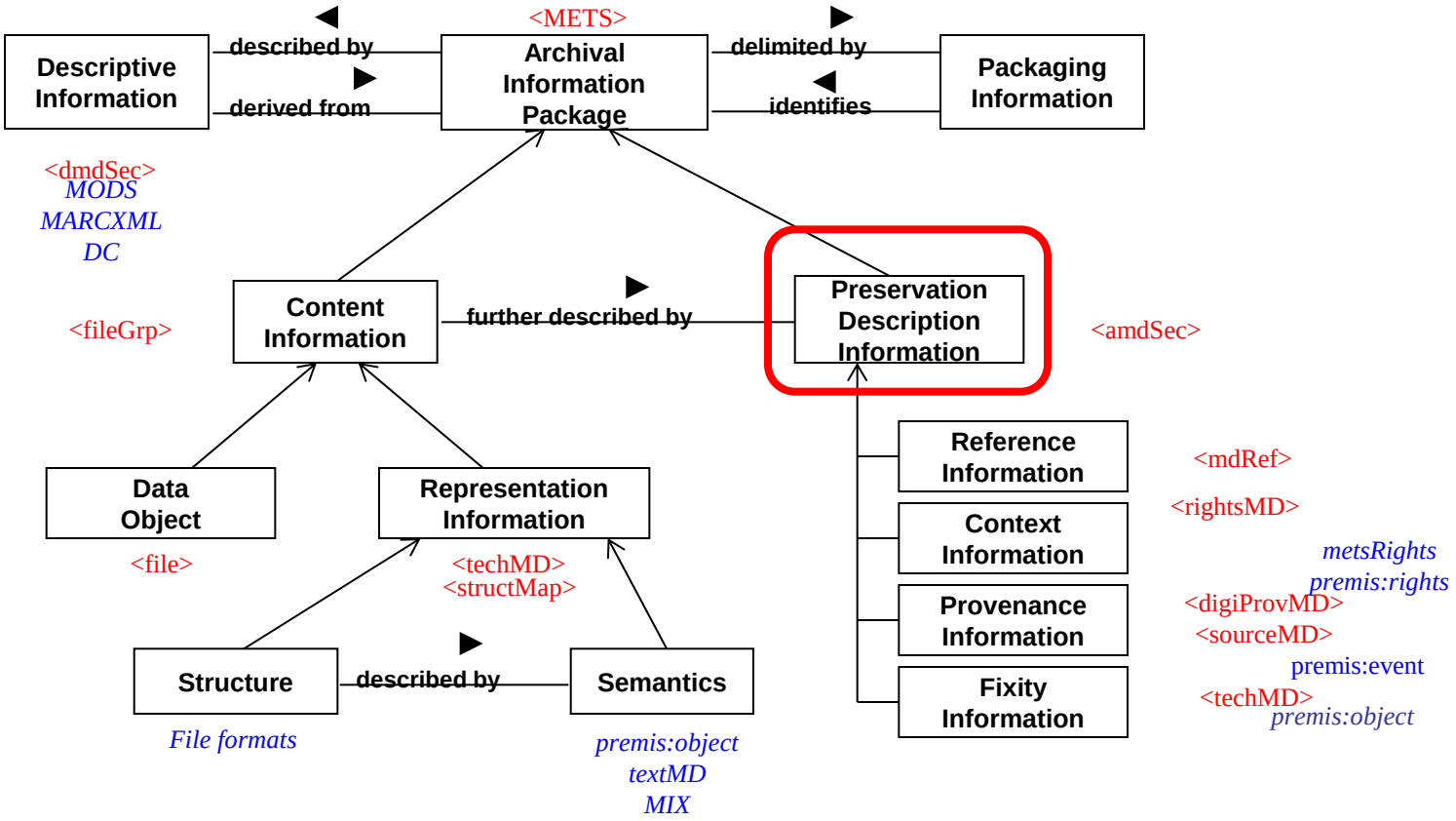
Administrative Metadata

- textMD (Schema for Technical Metadata for Text)
  - textMD Website
- NISO Technical Metadata for Digital Still Images Standards Committee
  - MIX Website
- Preservation Metadata
  - PREMIS Website

METS & PREMIS

- METS records the (possibly hierarchical) structure of digital objects, the names and locations of the files that comprise those objects, and the associated metadata
  - A METS document may be a unit of storage (e.g. OAIS AIP) or a transmission format (e.g. OAIS SIP or DIP)
  - METS is extensible and modular
  - METS uses extension “wrappers” or “sockets” where elements from other schemas can be plugged in
  - METS uses the XML Schema facility for combining vocabularies from different Namespaces
- The METS Editorial Board has endorsed PREMIS as an extension schema
- Many institutions trying to use PREMIS within the METS context

OAIS and METS



Legend

Black Arial = OAIS
Red Times New Roman = METS Primary Schema
Blue Times New Roman Italics = Extension Schema

METS extension schemas

- “wrappers” or “sockets” where elements from other schemas can be plugged in
- Provides extensibility
- Uses the XML Schema facility for combining vocabularies from different Namespaces
- Endorsed extension schemas:
  - Descriptive: MODS, DC, MARCXML
  - Technical metadata: MIX (image); textMD (text)
  - Preservation related: PREMIS

PREMIS

PRESERVATION METADATA MAINTENANCE ACTIVITY

Official Web Site

DISCLAIMER

- **PREMIS Data Dictionary for Preservation Metadata version 2.0** [PDF:3.1MB / 217p.]

  This publication includes the PREMIS Introduction, the Data Dictionary, Special Topics, Methodology and Glossary. The data dictionary and report with supporting documentation are also available as separate documents:

  - *PREMIS Data Dictionary, version 2.0* (PDF:1.1MB/184pp.)
    The PREMIS Data Dictionary for core preservation metadata needed to support the long-term preservation of digital materials.
  - *PREMIS Introduction and Supporting Documentation* (PDF:451K/51pp.)
    Provides information on the background, objectives, data model, implementation and other supporting documentation for the PREMIS Data Dictionary.
  - PREMIS Data Dictionary Entity Hierarchical Listing
    A hierarchical list by PREMIS semantic unit.
- **PREMIS schemas**
- **Proposed changes for PREMIS Data Dictionary version 2.0**
- **Data Dictionary for Preservation Metadata: Final Report of the PREMIS Working Group** (version 1.0) [PDF:3.2MB / 237p.]
- **Changes to PREMIS data dictionary (version 1.0) and schemas**
- **PREMIS Editorial Committee**
- **PREMIS Implementors' Group (PIG)**
- **Resources: articles and presentations**

News and articles:

- "Understanding PREMIS" by Priscilla Caplan for the Library of Congress: an overview of the PREMIS Data Dictionary for Preservation Metadata *(PDF: 543K/26pp.)*
  Also available in Spanish: Entender PREMIS *(PDF: 363K/30pp.)* NEW!
- Announcement: Workshop on PREMIS Preservation Metadata: Implementation Strategies, Rome, Italy, 5-6 February 2009, sponsored by Fondazione Rinascimento Digitale
- "Repository to Repository Transfer of Enriched Archival Information" by Priscilla Caplan, DLib Magazine, November/December 2008
- "Using METS, PREMIS and MODS for Archiving eJournals " by Angela Dappert and Markus Enders, DLib Magazine, September/October 2008
- "Battle of the Buzzwords: Flexibility vs. Interoperability When Implementing PREMIS with METS" by Rebecca Guenther, DLib Magazine, July/August 2008
- "PREMIS with a Fresh Coat of Paint: Highlights from the Revision of the PREMIS Data Dictionary for Preservation Metadata " by Brian Lavoie, DLib Magazine, May/June 2008
- PREMIS Data Dictionary version 2.0

PREMIS

PRESERVATION METADATA MAINTENANCE ACTIVITY

PREMIS Data Dictionary for Preservation Metadata, Version 3.0

The PREMIS Data Dictionary and its supporting documentation is a comprehensive, practical resource for implementing preservation metadata in digital archiving systems. The Data Dictionary is built on a data model that defines five entities: Intellectual Entities, Objects, Events, Rights, and Agents. Each semantic unit defined in the Data Dictionary is a property of one of the entities in the data model.

- PREMIS Data Dictionary (full document), Version 3.0 [PDF, 1.88 MB] (updated November 2015)
  This publication includes the PREMIS Introduction, the Data Dictionary, Special Topics, and Glossary.
- PREMIS Data Dictionary (without introductory materials), Version 3.0 [PDF, 1.22 MB] *(updated November 2015)*
  This publication includes only the Data Dictionary.
- PREMIS Data Dictionary, Version 3.0 Errata
- Hierarchical Listing of Semantic Units: PREMIS Data Dictionary, Version 3.0
- PREMIS 3 OWL Ontology
- Environment Changes Diagrams, Version 3.0
- PREMIS - Schema 3.0
- PREMIS - Schema 3.0 -- Changes from Schema 2.0
- Webinar: Digital Preservation Metadata and Improvements to PREMIS in Version 3.0
  DCMI/ASIST Joint Webinar, presented by Angela Dappert, May 27, 2015

PREMIS

PRESERVATION METADATA MAINTENANCE ACTIVITY

The PREMIS Data Dictionary for Preservation Metadata is the international standard for metadata to support the preservation of digital objects and ensure their long-term usability. Developed by an international team of experts, PREMIS is implemented in digital preservation projects around the world, and support for PREMIS is incorporated into a number of commercial and open-source digital preservation tools and systems. The PREMIS Editorial Committee coordinates revisions and implementation of the standard, which consists of the Data Dictionary, an XML schema, and supporting documentation.

Official Web Site

Data Dictionaries & Schemas

- PREMIS Version 3.0 (*current version*)
- PREMIS Version 2 (*v. 2.0-2.3*)
- PREMIS Version 1

Maintenance

- PREMIS Data Dictionary and Schema Revision Process
- PREMIS Maintenance Activity
- PREMIS Editorial Committee
- PREMIS Implementors' Group (PIG) Listserv
- PREMIS Feedback, Questions & Comments

Conformance

- PREMIS Conformance (PDF, 128KB)

Implementations

- PREMIS Implementation Fairs (*2009-2021*)
- PREMIS Examples (*v. 2.1-3.0*)
- PREMIS Implementation Registry

News and articles:

- iPRES 2021 - Tutorial: Understanding and Implementing PREMIS (Oct. 19, 2021)
- The PREMIS Editorial Committee would like to acknowledge the significant contribution that Angela Dappert made to the PREMIS standard
- PREMIS OWL Ontology version 3
  - Announcement
  - Ontology documents
- 2021 Revisions of Understanding PREMIS (Czech, English, German, Italian, and Portuguese)
- PREMIS - Schema 3.0
- PREMIS 3.0 Webinar
- PREMIS 3.0 Changes
- PREMIS - Version 3.0 Data Dictionary
- PREMIS - Version 3.0 Data Dictionary Errata Page

PREMIS Implementors' Group

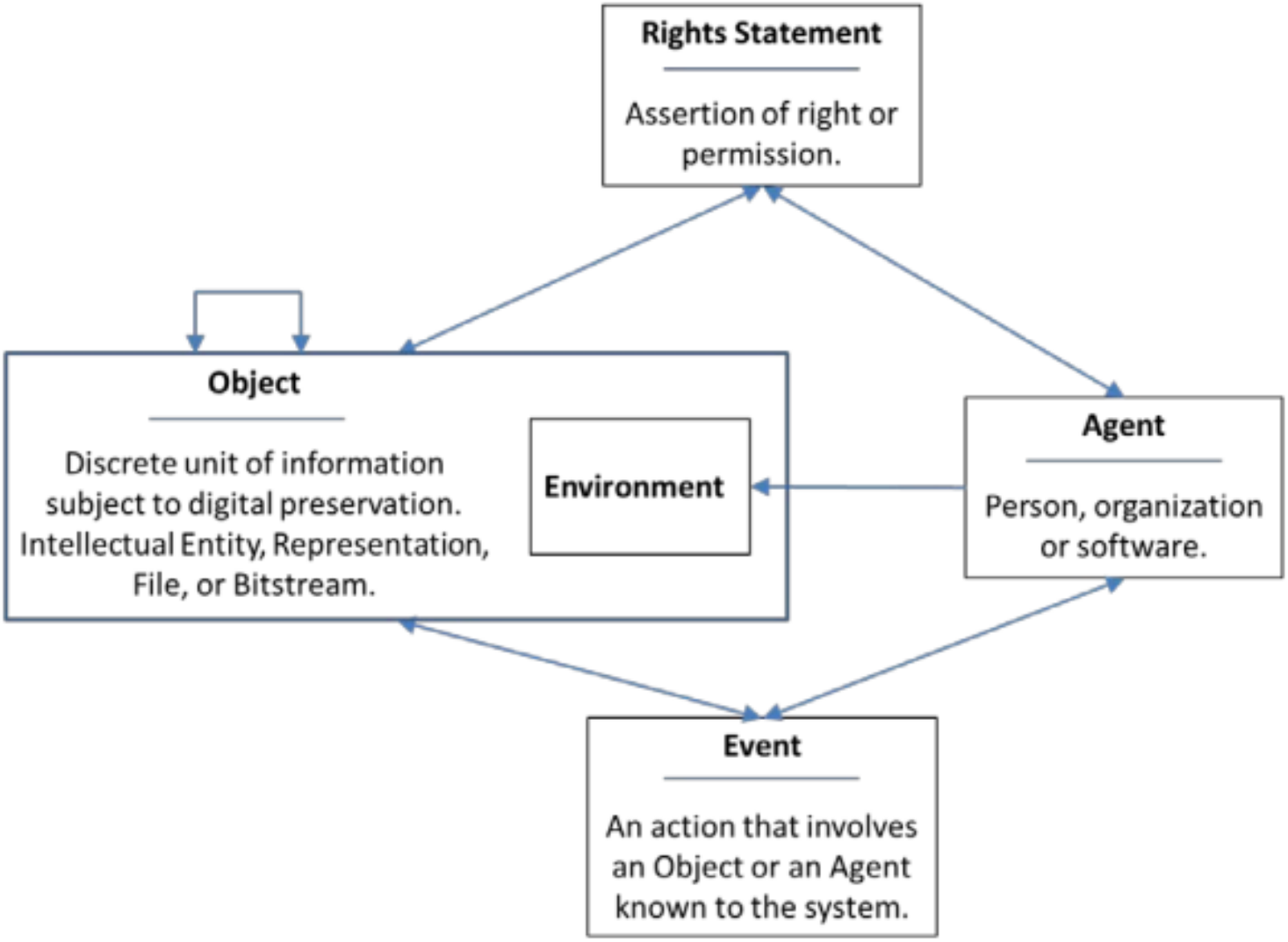
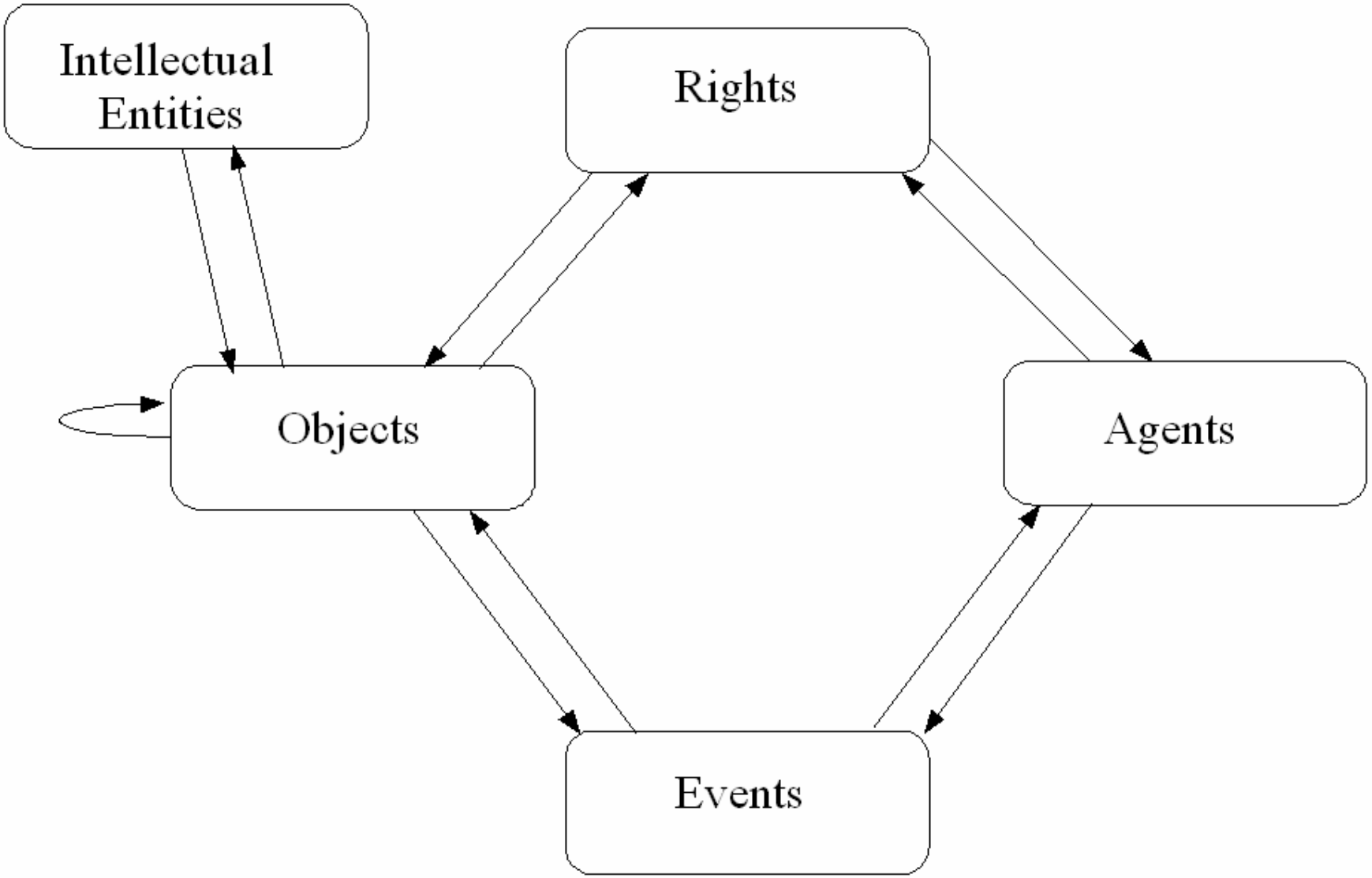


Figure 1: The PREMIS Data Model

Version 2.0 --- 2008

<xs:element name="**premis**" type="**premisComplexType**" />
<xs:element name="**object**" type="**objectComplexType**" />
 <xs:element name="**event**" type="**eventComplexType**" />
 <xs:element name="**agent**" type="**agentComplexType**" />
 <xs:element name="**rights**" type="**rightsComplexType**" />

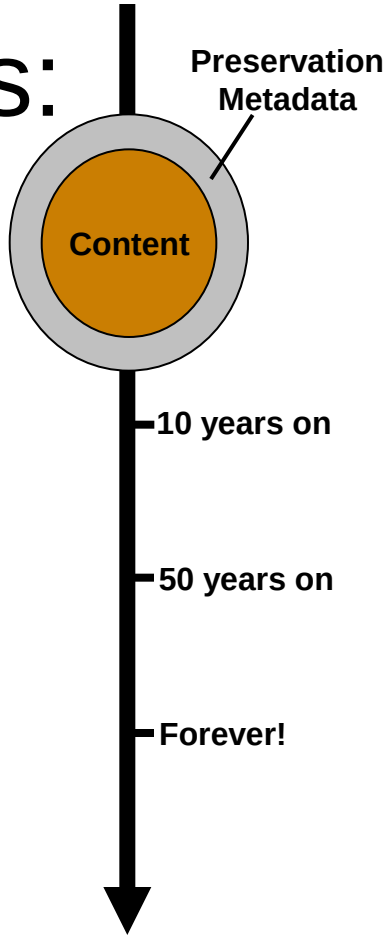
- “preservation metadata” as *the information a repository uses to support the digital preservation process*


Intellectual Entities
Rights
Objects
Agents
Events

Preservation metadata includes:

- Provenance:
  - *Who has had custody/ownership of the digital object?*
- Authenticity:
  - *Is the digital object what it purports to be?*
- Preservation Activity:
  - *What has been done to preserve it?*
- Technical Environment:
  - *What is needed to render and use it?*
- Rights Management:
  - *What IPR must be observed?*

➢ **Makes digital objects self-documenting across time**



PREMIS

- OAIS reference model specifies the Preservation Description Information (PDI)
- PREMIS used the OAIS information model as a starting point
- PREMIS Data Dictionary consolidated and further developed the conceptual types of information objects into more than 100 structured and logically integrated semantic units.
- PREMIS Data Dictionary provided detailed descriptions and guidelines to implement these semantic units.
- PREMIS Data Dictionary does not provide semantic units for Intellectual Entities, but provides semantic units to link to other metadata sources for Intellectual Entities
- All entities have reference (identification) information.
- No “packaging information” that links content with metadata, but PREMIS can be used with container schemas
- PREMIS deals mostly with representation, context, provenance, and fixity information, in keeping with PREMIS definition of preservation metadata.

PREMIS data model

Intellectual Entity: a set of content that is considered a single intellectual unit for purposes of management and description: for example, a particular book, map, photograph, or database. An Intellectual Entity can include other Intellectual Entities; for example, a Web site can include a Web page; a Web page can include an image. An Intellectual Entity may have one or more digital representations.

Object (or Digital Object): a discrete unit of information in digital form.

Event: an action that involves or impacts at least one Object or Agent associated with or known by the preservation repository.

Agent: person, organization, or software program/system associated with Events in the life of an Object, or with Rights attached to an Object.

Rights: assertions of one or more rights or permissions pertaining to an Object and/or Agent.

Objects

The Object entity has three subtypes: file, bitstream, and representation.

A **file** is a named and ordered sequence of bytes that is known by an operating system. A file can be zero or more bytes and has a file format, access permissions, and file system characteristics such as size and last modification date.

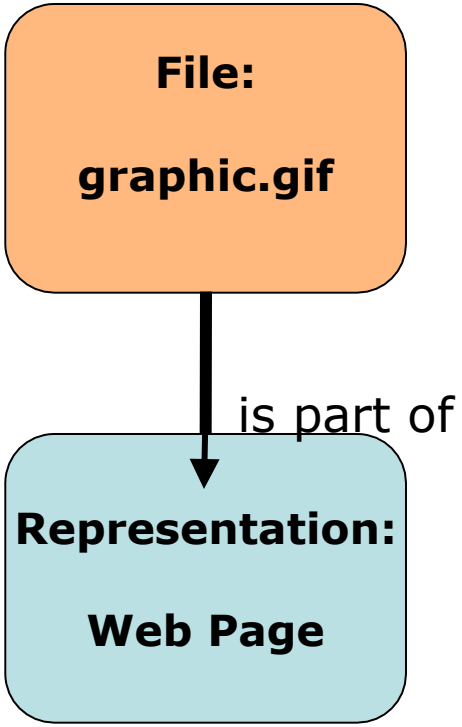
A **bitstream** is contiguous or non-contiguous data within a file that has meaningful common properties for preservation purposes. A bitstream cannot be transformed into a standalone file without the addition of file structure (headers, etc.) and/or reformatting the bitstream to comply with some particular file format.

A **representation** is the set of files, including structural metadata, needed for a complete and reasonable rendition of an Intellectual Entity. For example, a journal article may be complete in one PDF file; this single file constitutes the representation. Another journal article may consist of one SGML file and two image files; these three files constitute the representation. A third article may be represented by one TIFF image for each of 12 pages plus an XML file of structural metadata showing the order of the pages; these 13 files constitute the representation.

Example: Structural relationship File “is part of” Representation

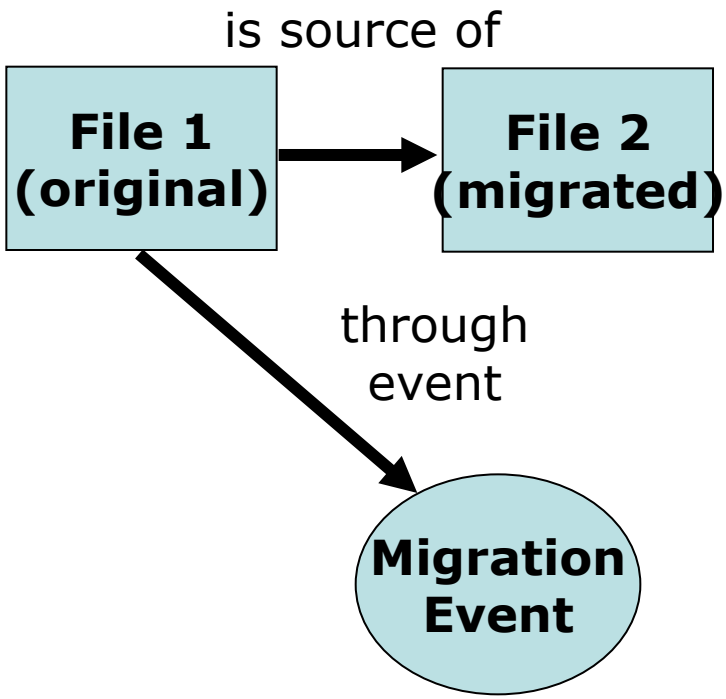
relationship [part of the description of File]

- relationshipType = structural
- relationshipSubType = is part of
- relatedObjectIdentification [the Web page]
  - relatedObjectIdentifierType = repositoryID
  - relatedObjectIdentifierValue = 0385503954
  - relatedObjectSequence = 0
- relatedEventIdentification [none]



Example: Derivation relationship
File 1 “is source of” File 2 through Migration Event

relationship [part of description of File 1]
- relationshipType = derivation
- relationshipSubType = is source of
- relatedObjectIdentification [identifier of File 2]
  - relatedObjectIdentifierType = repositoryID
  - relatedObjectIdentifierValue = F004400
  - relatedObjectSequence [none]
- relatedEventIdentification [Migration Event ID]
  - relatedEventIdentifierType = repEventID
  - relatedEventIdentifierValue = E0192
  - relatedEventSequence [none]



Semantic units pertaining to objects: technical metadata

- objectIdentifier
- preservationLevel
- significantProperties
- objectCategory
- objectCharacteristics
- creatingApplication
- originalName
  - storage
  - environment
- signatureInformation
  - relationship
- linkingEventIdentifier
- linkingIntellectual Entity Identifier
- linkingPermission StatementIdentifier

semantic unit	semantic unit	semantic unit	semantic unit	Value
OBJECT				
objectIdentifier	objectIdentifierType			hdl
objectIdentifier	objectIdentifierValue			loc.music
preservationLevel	preservationLevel Value			full
objectCategory				file
objectCharacteristics	compositionLevel			0
objectCharacteristics	fixity	messageDigestAlgorithm		MD5
objectCharacteristics	fixity	messageDigest		36b0319
objectCharacteristics	fixity	messageDigestOriginator		LocalDC
objectCharacteristics	size			2080089
objectCharacteristics	format	formatDesignation	formatName	image/tiff
objectCharacteristics	format	formatDesignation	formatVersion	6.0
objectCharacteristics	format	formatRegistry	formatRegistryName	PRONOM
objectCharacteristics	format	formatRegistry	formatRegistryKey	fmt/10
objectCharacteristics	format	formatRegistry	formatRegistryRole	specificat
objectCharacteristics	significant properties			<NONE>

2. Event

2.1 eventIdentifier (M, NR)

- 2.1.1 eventIdentifierType (M, NR)
- 2.1.2 eventIdentifierValue (M, NR)

2.2 eventType (M, NR)

2.3 eventDateTime (M, NR)

2.4 eventDetail (O, NR)

2.5 eventOutcomeInformation (O, R)

- 2.5.1 eventOutcome (O, NR)
- 2.5.2 eventOutcomeDetail (O, R)
  - 2.5.2.1 eventOutcomeDetailNote (O, NR)
  - 2.5.2.2 eventOutcomeDetailExtension (O, R)

2.6 linkingAgentIdentifier (O, R)

- 2.6.1 linkingAgentIdentifierType (M, NR)
- 2.6.2 linkingAgentIdentifierValue (M, NR)
- 2.6.3 linkingAgentRole (O, R)

2.7 linkingObjectIdentifier (O, R)

- 2.7.1 linkingObjectIdentifierType (M, NR)
- 2.7.2 linkingObjectIdentifierValue (M, NR)
- 2.7.3 linkingObjectRole (O, R)

Semantic units pertaining to Events: provenance and preservation activity

- eventIdentifier
- eventType
- eventDateTime
- eventDetail
- eventOutcome
- eventOutcomeDetail
- linkingAgentIdentifier
- linkingObjectIdentifier

SEMANTIC UNIT	SEMANTIC UNIT	VALUE
eventIdentifier	eventIdentifierType	LocalRepository
eventIdentifier	eventIdentifierValue	E001.1
eventType		validation
eventDateTime		2006-06-06T00:00:00.001
eventDetail		jhove1_1e
eventOutcomeInformation	eventOutcome	successful
eventOutcomeInformation	eventOutcomeDetail	Well-formed and valid
linkingAgentIdentifier	linkingAgentIdentifierType	AgentID
linkingAgentIdentifier	linkingAgentIdentifierValue	na12345
linkingAgentIdentifier	linkingAgentIdentifierRole	<NONE>
linkingObjectIdentifier	linkingObjectIdentifierType	hdl
linkingObjectIdentifier	linkingObjectIdentifierValue	loc.music/gottlieb.09601
linkingObjectIdentifier	linkingObjectRole	<NONE>
SEMANTIC UNIT	**SEMANTIC UNIT**	**VALUE**
eventIdentifier	eventIdentifierType	LocalRepository
eventIdentifier	eventIdentifierValue	E001.2
eventType		ingest
eventDateTime		2006-06-06T00:00:00.002
eventDetail		ingester1_0.exe
eventOutcomeInformation	eventOutcome	successful
eventOutcomeInformation	eventOutcomeDetail	<NONE>

4. Rights

- 4.1 rightsStatement (O, R)
  - 4.1.1 rightsStatementIdentifier (M, NR)
    - 4.1.1.1 rightsStatementIdentifierType (M, NR)
    - 4.1.1.2 rightsStatementIdentifierValue (M, NR)
  - 4.1.2 rightsBasis (M, NR)
  - 4.1.3 copyrightInformation (O, NR)
    - 4.1.3.1 copyrightStatus (M, NR)
    - 4.1.3.2 copyrightJurisdiction (M, NR)
    - 4.1.3.3 copyrightStatusDeterminationDate (O, NR)
    - 4.1.3.4 copyrightNote (O, R)
  - 4.1.4 licenseInformation (O, NR)
    - 4.1.4.1 licenseIdentifier (O, NR)
      - 4.1.4.1.1 licenseIdentifierType (M, NR)
      - 4.1.4.1.2 licenseIdentifierValue (M, NR)
    - 4.1.4.2 licenseTerms (O, NR)
    - 4.1.4.3 licenseNote (O, R)
  - 4.1.5 statuteInformation (O, R)
    - 4.1.5.1 statuteJurisdiction (M, NR)
    - 4.1.5.2 statuteCitation (M, NR)
    - 4.1.5.3 statuteInformationDeterminationDate (O, NR)
    - 4.1.5.4 statuteNote (O, R)
  - 4.1.6 rightsGranted (O, R)
    - 4.1.6.1 act (M, NR)
    - 4.1.6.2 restriction (O, R)
    - 4.1.6.3 termOfGrant (M, NR)
      - 4.1.6.3.1 startDate (M, NR)
      - 4.1.6.3.2 endDate (O, NR)
    - 4.1.6.4 rightsGrantedNote (O, R)
  - 4.1.7 linkingObjectIdentifier (O, R)
    - 4.1.7.1 linkingObjectIdentifierType (M, NR)
    - 4.1.7.2 linkingObjectIdentifierValue (M, NR)
  - 4.1.8 linkingAgentIdentifier (O, R)
    - 4.1.8.1 linkingAgentIdentifierType (M, NR)
    - 4.1.8.2 linkingAgentIdentifierValue (M, NR)
    - 4.1.8.3 linkingAgentRole (M, NR)
- 4.2 rightsExtension (O, R)

Semantic units pertaining to Rights

- rightsStatement
  - rightsStatement Identifier
  - rightsBasis
  - copyrightInformation
  - licenseInformation
  - statuteInformation
- rightsGranted
  - act
  - restriction
  - termOfGrant
  - rightsGranted
- linkingObjectIdentifier
- linkingAgentIdentifier
- rightsExtension

Semantic units pertaining to Agents

- **3. Agent**
- 3.1 agentIdentifier (R, M)
  - 3.1.1 agentIdentifierType (M, NR)
  - 3.1.2 agentIdentifierValue (M, NR)
- 3.2 agentName (O, R)
- 3.3 agentType (O, NR)

Mandatory (M) or Optional (O), Repeatable (R) or Not repeatable (NR)


Archiwum
Dokumentów
Elektronicznych

CZYM JEST PACZKA ARCHIWALNA?

Uporządkowane dokumenty w odpowiedniej strukturze to tzw. **paczka archiwalna,** która jest przekazywana do systemu ADE. Jej struktura jest określona i wygląda następująco:

Podczas przygotowywania paczki archiwalnej należy pamiętać o trójdzielnej budowie:

DOKUMENTY

Folder „dokumenty" nie może pozostać pusty i musi zawierać co najmniej jeden plik

METADANE

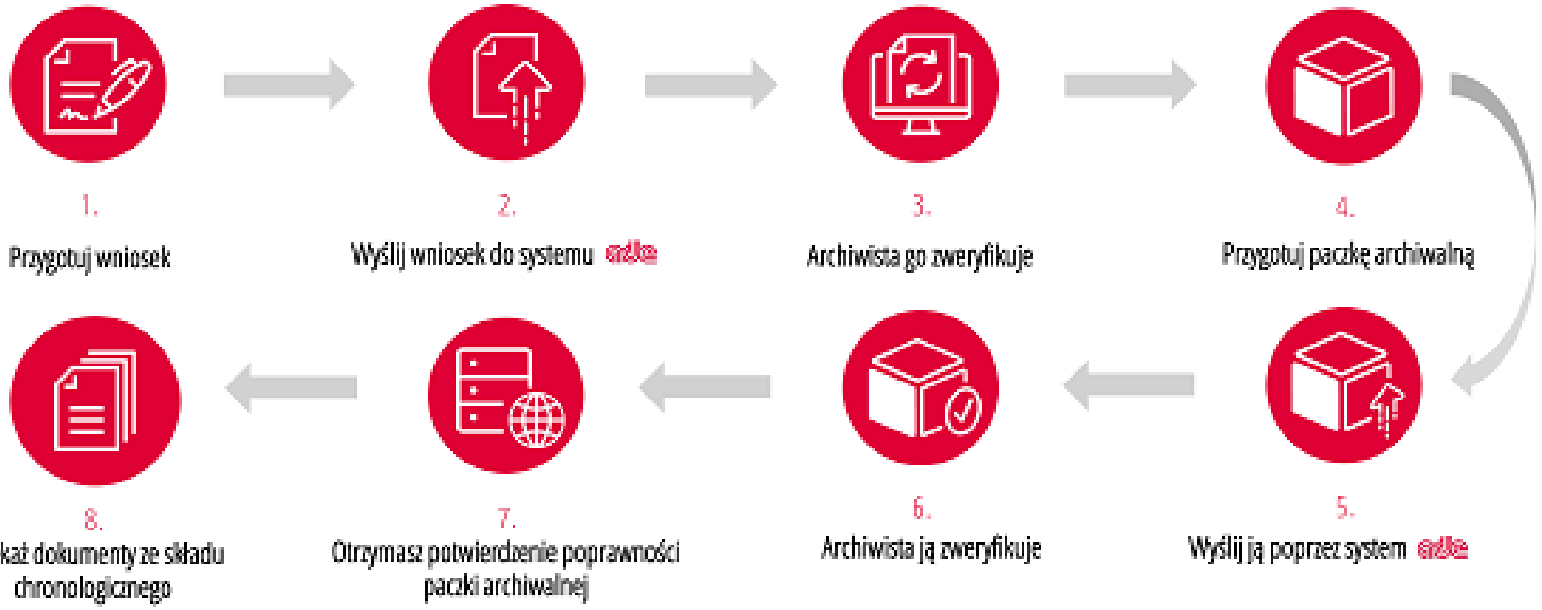
Każdemu dokumentowi umieszczonemu folderze „dokumenty" musi odpowiadać jeden plik zawierający metadane

SPRAWY

Każdy dokument znajdujący się w paczce archiwalnej musi przynależeć do co najmniej jednej sprawy lub grupy dokumentów

JAK DZIAŁA

Archiwum Dokumentów Elektronicznych

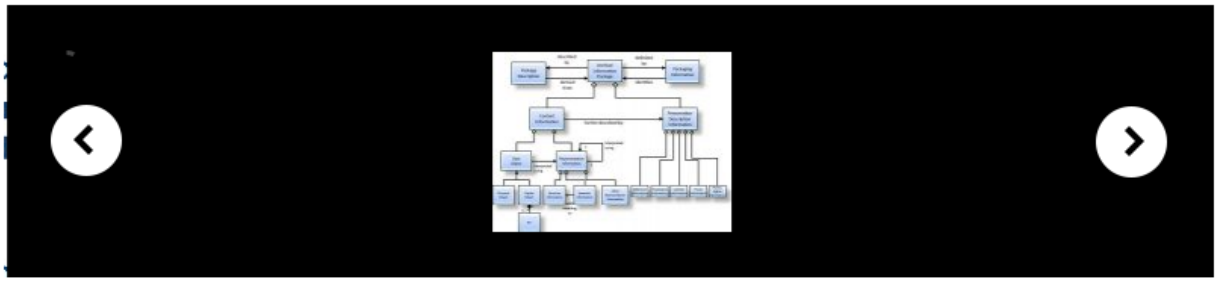


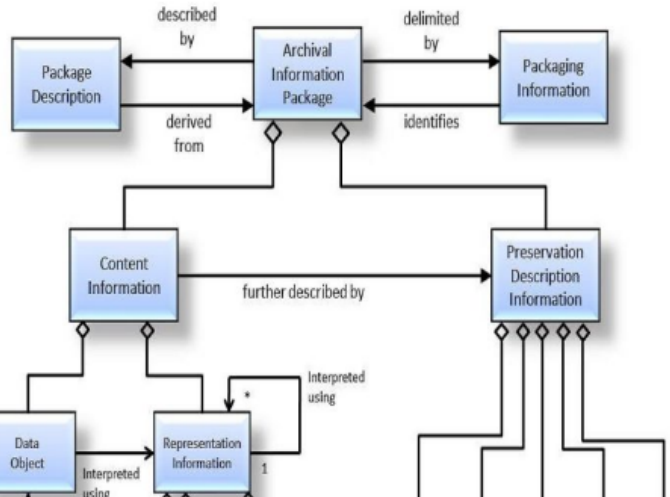
OAIS Reference Model (ISO 14721)

The fundamental standard for digital preservation

Home

This site holds information about the OAIS Reference Model.





OAIS Overview

The *Reference Model for an Open Archival Information System (OAIS)* was developed for use in facilitating a broad, discipline independent, consensus on the requirements for an archive or repository to provide long-term, preservation of digital information. It was also intended to support the development of additional digital preservation standards.

An OAIS is an archive consisting of an organization of people and systems that has accepted the responsibility to preserve information and make it available to a Designated Community. The standard defines a set of responsibilities that an OAIS archive must fulfil and this allows an OAIS archive to be distinguished from other uses of the term archive.

Since its adoption as both a Consultative Committee for Space Data Systems (CCSDS) and an ISO standard, the OAIS Reference Model has

Accommodation | Call for Papers

Latest news | Next events

IDCC20 - Workshop Registration is now open
29 October, 2019 | in DCC News

Money makes the world go around
29 August, 2019 | in DCC News

What did you say there Skippy? Learning from our Aussie neighbours
12 July, 2019 | in DCC News

How can the DCC help you?

About us
We are a world-leading centre of expertise in digital information curation...

What is digital curation?
Digital curation involves maintaining, preserving and adding value to digital research data throughout its lifecycle...

Editor's choice

Hello from Magdalena Drafiova, DMPonline Customer Development Manager
Meet our new DCC staff!

Research Infrastructure Self-Evaluation (RISE)
Our framework for assessing institutional

Recent blog posts

Managing computational notebooks - an overview of 'chopportunities'

DMPonline release notes: December 2019

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Lindsey Myers shares how University of

Recommendation for Space Data System Practices

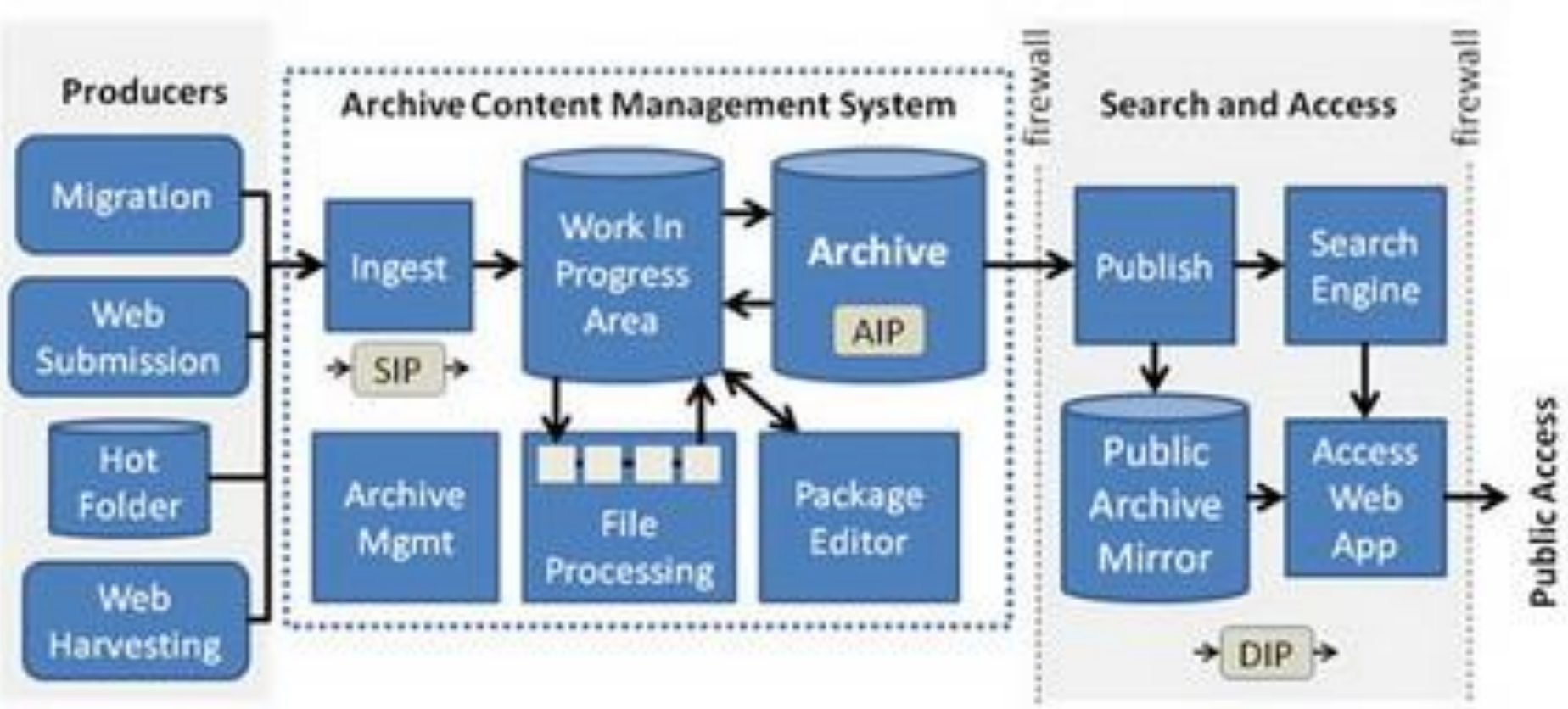
REFERENCE MODEL FOR AN OPEN ARCHIVAL INFORMATION SYSTEM (OAIS)

RECOMMENDED PRACTICE

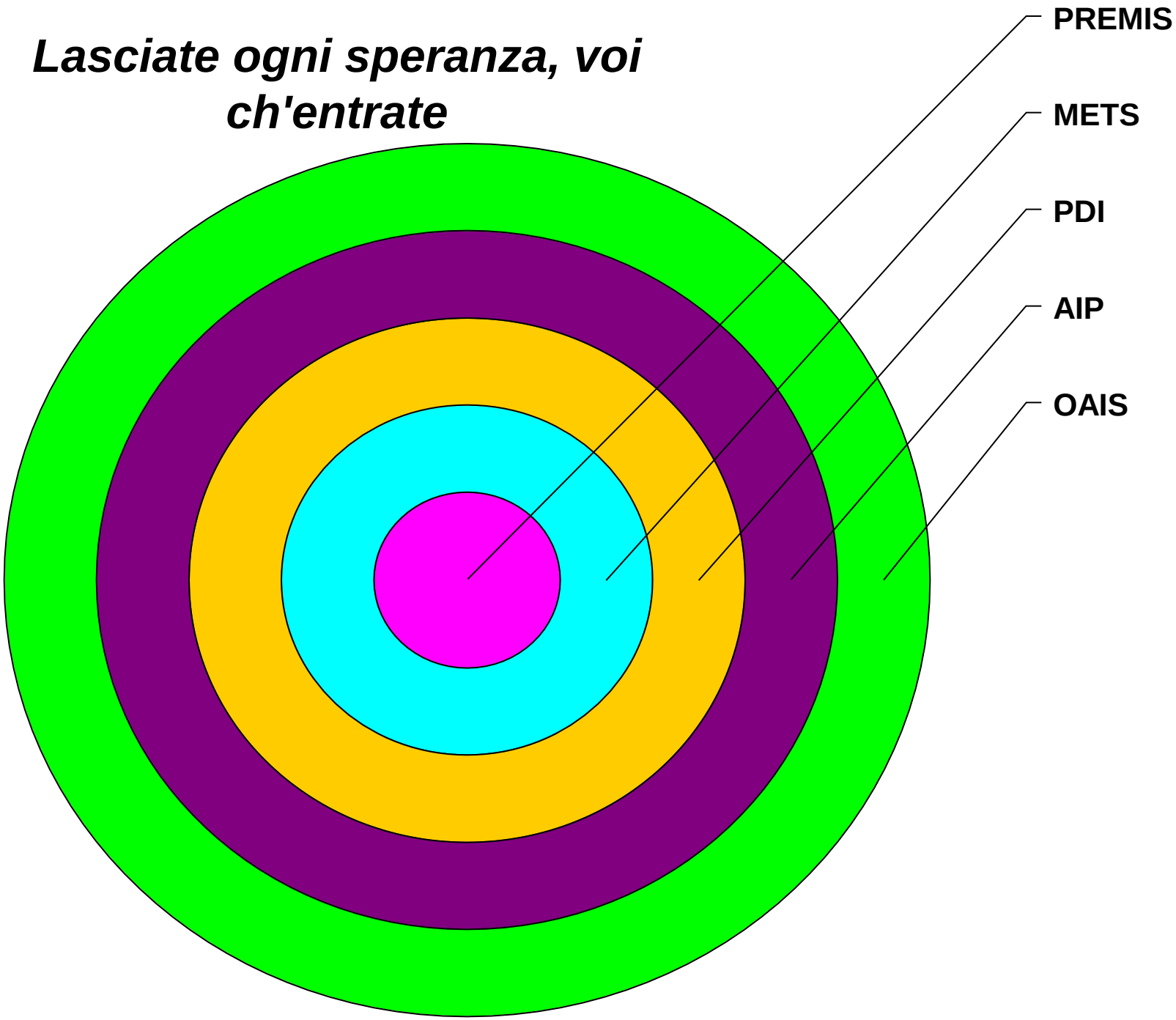
CCSDS 650.0-M-2

MAGENTA BOOK

June 2012


Producers
Migration
Web Submission
Hot Folder
Web Harvesting
Archive Content Management System
Ingest
SIP
Work In Progress Area
Archive
AIP
Archive Mgmt
File Processing
Package Editor
firewall
Search and Access
Publish
Search Engine
Public Archive Mirror
Access Web App
DIP
firewall
Public Access

Lasciate ogni speranza, voi ch'entrate




AIP
SIP
DIP