

# INTRODUCTION TO METS

UNT Libraries' TechTalks

# What's in a name?



Metadata Encoding and Transmission Standard  
Initiative of the DLF

Library of Congress is Maintenance Agency  
(<http://www.loc.gov/standards/mets/>)

The METS Editorial Board is responsible for schema  
content

# Overview



Provides a standard vocabulary and set of data structures for encoding hierarchical digital object content and metadata.

Allows for a wide range of uses including:

- OAIS container

- Unit of storage

- Transmission format

- Application source document

# Characteristics of METS



**METS is:**

an open standard

non-proprietary

developed by the library community

(relatively) simple

extensible

modular

# METS problem space



Encoding of digital objects while maintain hierarchical structure.

Storing associated metadata at various levels of granularity.

# METS – Main Parts



`metsHdr` = METS header

`dmdSec` = descriptive metadata section

`amdSec` = administrative metadata section

`fileSec` = file section

`structMap` = structural map

# METS - metsHdr



Used to encode information about the METS record itself.

agent = The agent element allows for various parties and their roles with respect to the METS document to be recorded

altRecordID = Alternative Record ID.

# METS - dmdSec



## Descriptive Metadata Section

Used to encode any descriptive metadata of the object.

Can hold metadata internally or reference metadata in another location

Can be referenced from any level of METS record, which allows for multiple levels of metadata granularity.

# METS - amdSec



## Administrative Metadata Section

techMD = technical metadata

rightsMD = rights metadata

sourceMD = source metadata

digiprovMD = digital provenance metadata

# METS - fileSec



Used to encode files “bit-streams” of a digital object.

Encodes information about the files:

ID = Internal METS Identifier

MIMETYPE = file mime-type (image/jpeg)

SEQ = file sequence

SIZE = file size in bytes

CREATED = date file was created

CHECKSUM = file checksum or fixity value

CHECKSUMTYPE = type of checksum or fixity algorithm used

OWNERID = owner id

ADMID = ID in the amdSec containing metadata for this file

DMDID = ID in the dmdSec containing metadata for this file

GROUPID = group id

USE = file usage

# METS – fileSec Example

<fileSec>

@ID{File Section ID}

<fileGrp>

@USE="Archive Master"

<file>

@ID=FILE\_{UUID}

@MIMETYPE={MIMETYPE}

@SIZE={filesize in bytes}

@CREATED={timestamp from when file was created}

@CHECKSUM={MD5 value of file content}

@CHECKSUMTYPE=MD5

@OWNERID=?

@ADMID={amdSec ID}

<FLocat>

@LOCTYPE=URL

@xlink:type="simple"

@xlink:href="http://example.com/00001.tif"

# METS - structMap



## Structural Map

Only “required” field in METS

Encodes the hierarchy of the digital object.

Encodes at any defined level

Logical

Physical

# How is it applicable to UNT?



We currently use an XML record to represent a digital object.

We currently have no way of encoding “hierarchy” into our digital objects

representations or manifestations

Example: Texas Register

Using standards is always good when it comes to grants.