

# Accessioning

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# What is Accessioning?

Archival institution takes physical and legal custody of a group of records from a donor and documents the transfer in a register or other representation of the institution's holdings

## Within AIMS Framework

Processes which establish physical, administrative and intellectual control over transferred records; assessment and documentation of future needs; documentation of actions taken; beginning of safe storage and maintenance

# Elements of Accessioning

1. Prerequisites
  - Policies
  - Institutional practices and workflows
  - Software, hardware, and expertise to support transfer
2. Transfer records and gain administrative control
3. Physical control and stabilization
4. Intellectual control and documentation to support further processes
5. Maintain accessioned records

# Elements of Accessioning

1. Prerequisites
2. Transfer records and gain administrative control
  - Ensure legal agreement has been received and filed
  - Review documentation generated in collection development in preparation for transfer
  - Transfer material in accordance with donor/transfer agreements
  - Verify transfer
  - Document transfer in register, accession record, etc.
3. Physical control and stabilization
4. Intellectual control and documentation to support further processes
5. Maintain accessioned records

# Elements of Accessioning

1. Prerequisites
2. Transfer records and gain administrative control
3. Physical control and stabilization
  - Assign identifiers
  - Document media
  - Assess condition of media and records
  - Transfer records off media or image media
  - Harvest technical metadata from files and filesystem
4. Intellectual control and documentation to support further processes
5. Maintain accessioned records

# Elements of Accessioning

1. Prerequisites
2. Transfer records and gain administrative control
3. Physical control and stabilization
4. Intellectual control and documentation to support further processes
  - Harvest descriptive and structural metadata from files/filesystems
  - Audit trails; lists of actions and whether they succeeded/failed
  - Future needs for processing, appraisal, access, and preservation
  - Restrictions
  - Identification of duplicate assets
  - Acknowledgement to donor
5. Maintain accessioned records

# Elements of Accessioning

1. Prerequisites
2. Transfer records and gain administrative control
3. Physical control and stabilization
4. Intellectual control and documentation to support further processes
5. Maintain accessioned records
  - Perform necessary normalizations to preservation formats (and, optionally, access formats)
  - Create package for storage containing records and metadata
  - Transfer package to storage environment
  - Verify success of transfer
  - Record storage location, any normalization information, and success of transfer in appropriate location

# Case Study: Re-Accessioning at Yale

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# Overview

- Collaborative capacity building across two repositories
  - Manuscripts and Archives
  - Beinecke Rare Book and Manuscript Library
- Addressing previously received accessions of containing electronic records on media
- Still in testing phase, but working towards implementing in production

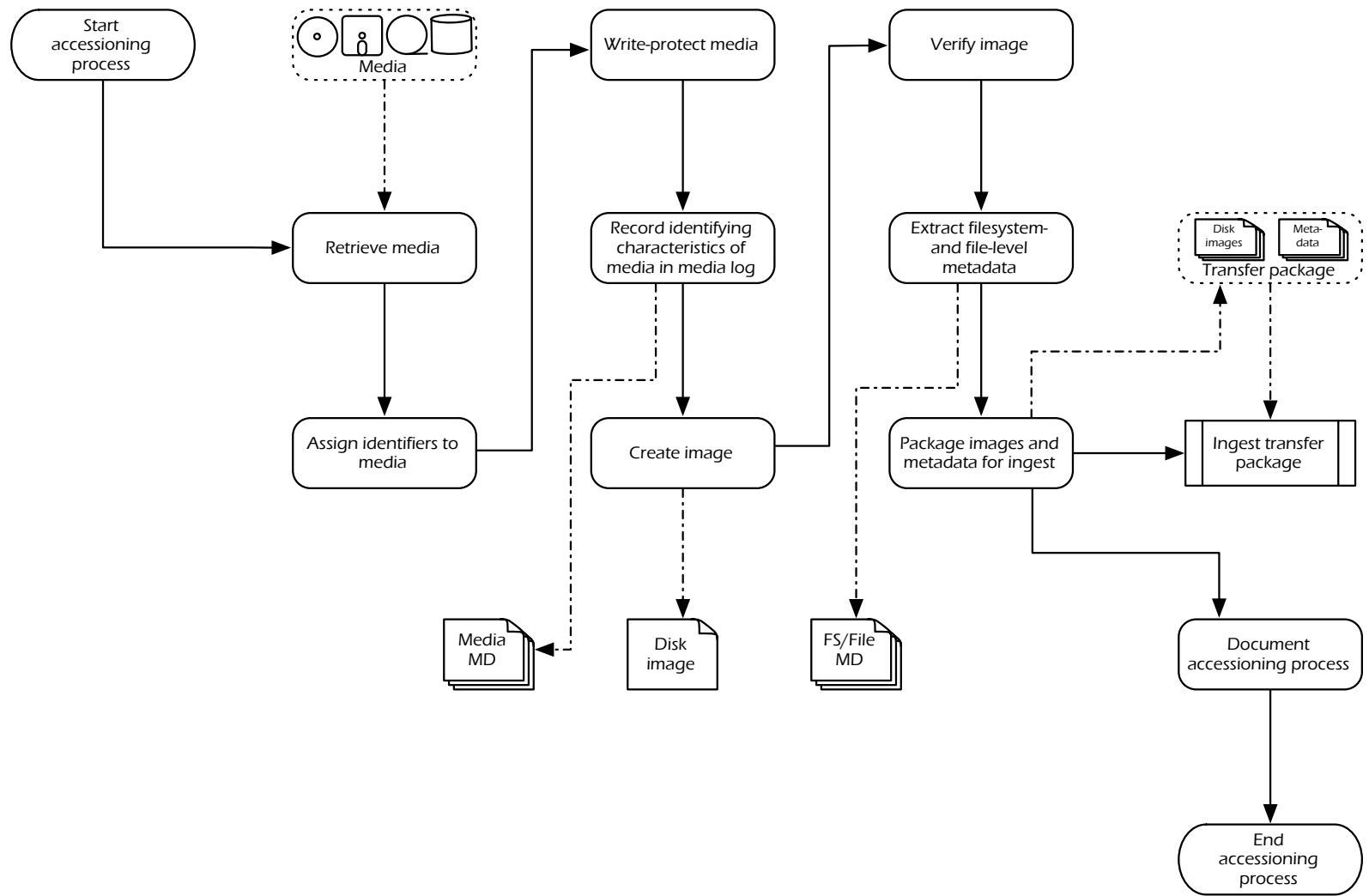
# Types of Records and Media

- Wide variety of records creators
  - Literary authors
  - University faculty
  - University offices
  - Architectural firms
- Common types of media
  - Floppy disks: 5.25" and 3.5"
  - Optical media: CDROM, CD-R, DVD-R, etc.
  - Zip disks
  - USB flash drives

# Goals of Re-Accessioning

- Identify, document, and register media
- Mitigate risk of media deterioration and obsolescence
- Extract basic metadata from filesystems on media and files contained on filesystems

# Re-Accessioning Workflow



# Disk Imaging

- Using “forensic” (bit-level) imaging process
- Ensure data on media is not manipulated using write-protection
- Uses software to acquire images
- Includes hash-based verification process



**Evidence Tree**

- 2004-M-008.dd-0005.001
  - C910927A001 [FAT12]
    - [root]
    - [unallocated space]

**File List**

Name	Size	Type	Date Modified
!w0000	59 KB	Regular File	7/21/1997 7:58...
Hangman.bak	56 KB	Regular File	6/10/1997 5:23...
Hangman.bak	58 KB	Regular File	6/10/1997 5:36...
Hangman.bak	59 KB	Regular File	7/21/1997 7:57...
Hangman.tex	0 KB	Regular File	6/10/1997 5:23...
Hangman.tex	59 KB	Regular File	7/21/1997 7:58...
KENNEDY.WPD	41 KB	Regular File	10/17/1997 11:...
Q3.DIR	1 KB	Regular File	7/5/1999 11:18...
Q3.DIR.FileSlack	1 KB	File Slack	
QDATA.ABD	10 KB	Regular File	7/5/1999 11:12...

0000	43 39 31 30 39 32 37 41-30 30 31 28 00 00 00 00	C910927A001 (.....
0010	00 00 00 00 00 00 00 4C 77-1A 21 00 00 00 00 00	.....Lw.!.....
0020	51 44 41 54 41 20 20 20-51 44 46 20 00 43 48 5A	QDATA QDF .CHZ
0030	E5 26 31 3D 00 00 48 5A-E5 26 02 00 C0 7D 04 00	â€1=..HZâ€..À}..
0040	51 44 41 54 41 20 20 20-51 53 44 20 00 B4 4C 5A	QDATA QSD .LZ
0050	E5 26 31 3D 00 00 48 5A-E5 26 92 02 60 49 00 00	â€1=..HZâ€..I..
0060	51 44 41 54 41 20 20 20-51 45 4C 20 00 66 4D 5A	QDATA QEL .fMZ
0070	E5 26 31 3D 00 00 65 B7-B6 26 B7 02 00 3C 00 00	â€1=..e.¶â€..<..
0080	51 44 41 54 41 20 20 20-41 42 44 20 00 16 4E 5A	QDATA ABD .NZ
0090	E5 26 31 3D 00 00 8B 59-E5 26 D5 02 97 26 00 00	â€1=...Yâ€O.â€..
00a0	51 33 20 20 20 20 20 20-44 49 52 20 00 88 4E 5A	Q3 DIR .NZ
00b0	E5 26 31 3D 00 00 4E 5A-E5 26 E9 02 17 00 00 00	â€1=..NZâ€é.....
00c0	E5 41 4E 47 4D 41 4E 20-42 4B 21 20 00 13 F9 85	â€ANGMAN BK! ..ù.
00d0	CA 22 CA 22 00 00 FA 85-CA 22 23 00 77 F7 00 00	Ê"Ê"..ú.Ê"#.w+..
00e0	E5 41 4E 47 4D 41 4E 20-42 4B 21 20 00 2F 41 89	â€ANGMAN BK! ./A.
00f0	CA 22 CA 22 00 00 44 89-CA 22 02 00 91 F7 00 00	Ê"Ê"..D.Ê".....
0100	E5 41 4E 47 4D 41 4E 20-54 58 54 20 00 6B 65 89	â€ANGMAN TXT .ke.
0110	CA 22 CA 22 00 00 66 89-CA 22 03 00 41 F9 00 00	Ê"Ê"..f.Ê"..Au..
0120	E5 48 00 61 00 6E 00 67-00 6D 00 0F 00 B6 61 00	â€H.a.n.g.m...¶a.
0130	6E 00 2E 00 74 00 65 00-78 00 00 00 00 00 FF FF	n..t.e.x.....ÿÿ
0140	E5 41 4E 47 4D 41 4E 20-54 45 58 20 00 A0 F6 8A	â€ANGMAN TEX .ö.
0150	CA 22 CA 22 00 00 F6 8A-CA 22 00 00 00 00 00 00	Ê"Ê"..ö.Ê".....
0160	E5 57 30 30 30 30 20 20-20 20 20 08 1C F7 8A	â€W0000 ..÷.
0170	CA 22 CA 22 00 00 F9 8A-CA 22 04 00 8C DD 00 00	Ê"Ê"..ù.Ê"....Ý..
0180	E5 48 00 61 00 6E 00 67-00 6D 00 0F 00 22 61 00	â€H.a.n.g.m...a.

**Custom Content Sources**

Evidence:File System Path File	Options

New Edit Remove Remove All Create Image

# Media Log

- Using SharePoint list
- Contains unique identifier of media
- Records physical/logical characteristics of media
- Documents success, failure, or status of various processes and additional notes

# Media Log

## Electronic Records on Media Accessioning Log

New ▾	Actions ▾	Settings ▾											View: <b>All Items</b>
ID	Type	Media number	Media Format	Imaging Date	Imaging Successful?	Bag Created?	Metadata Extracted?	Transfer to Storage Date	Examiner	Image format	Imaging Software	Source	
		2011-M-075.0001	CD-R		No	No	No		Glick, Kevin	N/A	N/A	FAT	
		2011-M-075.0002	DVD-R		Yes	No	Yes		Glick, Kevin	ISO	ImgBurn	ISO9	
		2011-M-075.0003	DVD-R		Yes	No	Yes		Glick, Kevin	ISO	ImgBurn	ISO9 (1.02)	
		2011-M-075.0004	DVD-R		Yes	No	Yes		Glick, Kevin	ISO	ImgBurn	ISO9 (1.02)	
		2011-M-075.0005	DVD-R		Yes	No	Yes		Glick, Kevin	ISO	ImgBurn	ISO9 (1.02)	
		2011-M-075.0006	DVD-R		Yes	No	Yes		Glick, Kevin	ISO	ImgBurn	ISO9 (1.02)	
		2011-M-075.0007	CD-R		Yes	No	No		Glick, Kevin	ISO	ImgBurn	ISO9	
		2011-M-075.0008	CD-R		Yes	No	No		Glick, Kevin	ISO	ImgBurn	ISO9	
		2011-M-075.0009	CD-R		Yes	No	Yes		Glick, Kevin	ISO	ImgBurn	ISO9 (1.02)	
		2011-M-075.0010	DVD-R		Yes	No	Yes		Glick, Kevin	ISO	ImgBurn	ISO9 (1.02)	
		2011-M-075.0011	CD-R		Yes	No	Yes		Glick, Kevin	ISO	ImgBurn	ISO9	
		2011-M-075.0012	CD-R		Yes	No	Yes		Glick, Kevin	ISO	ImgBurn	ISO9	
		2011-M-075.0013	Zip disk		Yes	No	Yes		Glick, Kevin	dd (Raw)	FTK Imager 3.0.0.1443	FAT	

AIMS →



# Media Log

## Electronic Records on Media Accessioning Log

Type	Media number	Media Format	Imaging Date	Imaging Successful?	Bag Created?
	2011-M-075.0001	CD-R		No	No
	2011-M-075.0002	DVD-R		Yes	No
	2011-M-075.0003	DVD-R		Yes	No
	2011-M-075.0004	DVD-R		Yes	No
	2011-M-075.0005	DVD-R		Yes	No
	2011-M-075.0006	DVD-R		Yes	No
	2011-M-075.0007	CD-R		Yes	No
	2011-M-075.0008	CD-R		Yes	No
	2011-M-075.0009	CD-R		Yes	No
	2011-M-075.0010	DVD-R		Yes	No
	2011-M-075.0011	CD-R		Yes	No
	2011-M-075.0012	CD-R		Yes	No
	2011-M-075.0013	Zip disk		Yes	No

## Electronic Records on Media Accessioning Log: 2011-M-075.0008

New Item   Edit Item   Delete Item   Manage Permissions   Alert Me	
<b>Media number</b>	2011-M-075.0008
<b>Media Format</b>	CD-R
<b>Media Density (floppies only)</b>	N/A
<b>Interface</b>	N/A
<b>Label text</b>	Osaka Monograph Final Images Aug 29 2003 Monograph Latest Files
<b>Manufacturer</b>	
<b>Serial Number (hard drives only)</b>	
<b>Examiner</b>	Glick, Kevin
<b>Imaging Successful?</b>	Yes
<b>Imaging Date</b>	
<b>Image filename</b>	2011-M-075.0008.ISO
<b>Source File System</b>	ISO9660, Joliet
<b>Image format</b>	ISO
<b>Imaging Software</b>	ImgBurn
<b>Image Fixity Function</b>	MD5
<b>Image Fixity Value</b>	dbca43c94690edff07329b6687550f60
<b>Notes</b>	mam54 04/28/2011: Could not extract metadata using fiwalk; log file from imaging process says that the block structure is Mode 2/Form 1
<b>Metadata Extracted?</b>	No
<b>Bag Created?</b>	No
<b>Transfer to Storage Date</b>	
<b>Fiscal Year</b>	2010-11
Created at 4/27/2011 9:35 AM by Glick, Kevin Last modified at 4/28/2011 4:26 PM by Matienzo, Mark	

# Metadata Extraction

- Can be repurposed for descriptive, administrative, and technical metadata
- Uses command-line tools (Sleuthkit, fiwalk)
- Outputs XML document

# Packaging and Transfer

- Using BagIt packages/Bagger application
- Packages contain disk images, extracted metadata, imaging logs, and high-level accession information
- Transfer to storage is verified by comparison against manifest

Create **N**ew Bag   
 **O**pen Existing Bag   
 Create Bag In Place   
 **V**alidate Bag   
 Is Bag Complete   
 **C**lose Bag   
 **S**ave Bag   
 Save Bag As...

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**Bagger**

**Payload**

- data
  - 2004-M-088.0001
  - 2004-M-088.0002
  - 2004-M-088.0003
  - 2004-M-088.0004
    - 2004-M-088.0004.dd
    - 2004-M-088.0004.txt
    - 2004-M-088.0004.xml
  - 2004-M-088.0005
  - 2004-M-088.0006
  - 2004-M-088.0007
  - 2004-M-088.0008
  - 2004-M-088.0009
  - 2004-M-088.0010

**Tag Files**

- mssa
  - bagit.txt
  - tagmanifest-md5.txt
  - bag-info.txt
  - manifest-md5.txt

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**Bag Info**

File name: /Users/mam54/Desktop/4n6/mssa.2004-M-088  
 Profile: YUL\_DISKIMG\_ACCN\_SIP\_0.1      Bag version: 0.96  
 Holey Bag?: false      Serialize Type?: none

**Bag-Info**

Standard :  **Add**

Accession-Number **R**

External-Identifier **R**

Bag-Size  **X**

Payload-Oxum  **X**

Source-Organization **R**

External-Description **R**

Profile Name **R**

Bagging-Date  **X**

Forms-Part-Of **R**

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**Console**

Complete: Valid: Profile Compliant:

[Wed Aug 17 21:49:58 EDT 2011]: This space will contain messages generated by the creating and updating of bags.  
 Mouse over the status label to see it's description.