

Digital Curation: Two Paths

Society of California Archivists

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Ventura, California

Peter Chan, Digital Archivist, Manuscripts
Department of Special Collections & Digital Library System Services

Agenda

- Accessioning
- Interface between AccessData FTK and In-house Repository
- Forensic Lab
- Future

Accessioning

- Computers, floppy disks, external hard drives?
- Electronic files?

Physical: Media



AT Accession Record

Resources Linked to this accession

Resource Identifier ▲	Resource Title
M1839	Rebecca Solnit papers

Resource Type

Title
Rebecca Solnit papers

Physical Description

Extent Display	Container Summ...	Extent Number	Extent Type
3 computer, por...	1 Macintosh Pow...	3	computer, porta...

Repository SPECCOLL

Physical Descriptions Record 1 of

Extent Number

Container Summary

1 Macintosh PowerBook 160
1 Macintosh Powerbook G3
1 Apple PowerBook G4

Physical Detail

Dimensions

Created: Mar 30, 2012 by pchan3 | Modified: Apr 2, 2012 by pchan3 | Record Number

Virtual: Files

File Overview

4/2/2012

Evidence Groups

Ungrouped: 604578

File Items

Evidence Items: 2

Checked Items: 0

Unchecked Items: 604578

File Category

Archives: 11601

Databases: 19

Documents: 117754

Email: 60435

Executable: 1608

AT Accession Record for Files

Physical Description

Primary Extent Alternate Extent

Extent Number

Container Summary

megabytes: 70,459
number of files: 60,458
captured from: 2 portable computers

Interface between AccessData FTK and In-house Repository

- XML FTK report is in fact XML-FO which is designed for printing as PDF
- One programmer described it as a “mess”
- Transformation is needed!!

XML Content File

```
Report.xml* x Report-transformed.xml x
1 <?xml version="1.0" encoding="UTF-8"?>
2 <ftk_report xmlns:fo="http://www.w3.org/1999/XSL/Format">
3   <series>Series 6: Born Digital Materials</series>
4   <collection_title>Stephen Jay Gould papers</collection_title>
5   <callnumber>M1437</callnumber>
6   <file>
7     <filename>BU3A5</filename>
8     <item_number>1004</item_number>
9     <filepath>CM006.001/NONAME [FAT12]/[root]/BU3A5</filepath>
10    <disk_image_no>CM006</disk_image_no>
11    <filesize>35654</filesize>
12    <filesize_unit>B</filesize_unit>
13    <file_creation_date>n/a</file_creation_date>
14    <file_accessed_date>n/a</file_accessed_date>
15    <file_modified_date>12/8/1988 6:48:48 AM (1988-12-08 14:48:48 UTC)</file_modified_date>
16    <md5_hash>976EDB782AE48FE0A84761BB608B1880</md5_hash>
17    <sha1_hash>E718AEFF97B5A5E6B4B2A7812CD87B64C150F3DF</sha1_hash>
18    <restricted>False</restricted>
19    <access_rights>Public</access_rights>
20    <title>The Burgess Shale and the Nature of History </title>
21    <filetype>WordPerfect 4.2</filetype>
22    <duplicate_file> </duplicate_file>
23    <export_path>files\BU3A5</export_path>
24  </file>
25  <file>
26    <filename>BURCH2</filename>
27    <item_number>3003</item_number>
28    <filepath>CM005.001/NONAME [FAT12]/[root]/BURCH2</filepath>
29    <disk_image_no>CM005</disk_image_no>
30    <filesize>58715</filesize>
31    <filesize_unit>B</filesize_unit>
32    <file_creation_date>n/a</file_creation_date>
33    <file_accessed_date>n/a</file_accessed_date>
34    <file_modified_date>10/20/1988 10:44:46 AM (1988-10-20 17:44:46 UTC)</file_modified_date>
35    <md5_hash>0DDF3CB211DECC768500E008BD181949</md5_hash>
36    <sha1_hash>F93D649ED1DA6D3EDE0679DB1EF39490C6FDA4BE</sha1_hash>
37    <restricted>False</restricted>
38    <access_rights>Public</access_rights>
39    <title>The Burgess Shale and the Nature of History </title>
40    <filetype>WordPerfect 4.2</filetype>
41    <duplicate_file> </duplicate_file>
42    <export_path>files\BURCH2</export_path>
43  </file>
44  ...
```

XML-FO from FTK

```
Report.xml* x
1 <?xml version="1.0" encoding="UTF-8"?>
2 <fo:root xmlns:xs="http://www.w3.org/2001/XMLSchema" font-family="arial unicode ms" font-size="10pt"
3   xmlns:fo="http://www.w3.org/1999/XSL/Format">
4   <fo:layout-master-set>
5     <fo:simple-page-master master-name="TOC">
6       <fo:region-body region-name="body" margin-top="0.5in" margin-bottom="1in"
7         margin-left="0.5in" margin-right="0.5in"/>
8       <fo:region-before extent="0.5in"/>
9       <fo:region-after extent="0.5in"/>
10    </fo:simple-page-master>
11    <fo:simple-page-master master-name="caseInfoPage">
12      <fo:region-body region-name="body" margin-top="0.5in" margin-bottom="1in"
13        margin-left="0.5in" margin-right="0.5in"/>
14      <fo:region-before extent="0.5in"/>
15      <fo:region-after extent="0.5in"/>
16    </fo:simple-page-master>
17    <fo:simple-page-master master-name="bookmarksPage">
18      <fo:region-body region-name="body" margin-top="0.5in" margin-bottom="1in"
19        margin-left="0.5in" margin-right="0.5in"/>
20      <fo:region-before extent="0.5in"/>
21      <fo:region-after extent="0.5in"/>
22    </fo:simple-page-master>
23    <fo:simple-page-master master-name="index">
24      <fo:region-body region-name="body" margin-top="0.5in" margin-bottom="1in"
25        margin-left="0.5in" margin-right="0.5in" column-count="2" column-gap="2pc"/>
26      <fo:region-before extent="0.5in"/>
27      <fo:region-after extent="0.5in"/>
28    </fo:simple-page-master>
29  </fo:layout-master-set>
30  <fo:page-sequence master-reference="TOC">
```

XSLT

```
• Report.xml x • Report-transformed.xml x • Batch1.xml x • Batch1mods.xml x • FTK XSL3.xslF x
1 <?xml version="1.0" encoding="UTF-8"?>
2 <xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
3   xmlns:fo="http://www.w3.org/1999/XSL/Format" version="2.0">
4
5   <!-- This is the root level template -->
6   <xsl:template match="/">
7     <ftk_report>
8       <xsl:apply-templates/>
9     </ftk_report>
10  </xsl:template>
11
12  <xsl:template
13    match="//fo:page-sequence[2][fo:flow/fo:block[text()='Case Information']]/fo:flow/fo:table[1]/fo:table-body/fo:table-row[3]/fo:table-ce
14  <collection_title>
15    <xsl:value-of select="substring-after(.,' ')" />
16  </collection_title>
17  <callnumber>
18    <xsl:value-of select="substring-before(.,' ')" />
19  </callnumber>
20  </xsl:template>
21
22  <!-- This template matches any fo:page-sequence that contains "Case Information" The following fo:block[7] contains the "Series Information
23  <xsl:template
24    match="//fo:page-sequence[1][fo:flow/fo:block[text()='Case Information']]/fo:flow/fo:block[7]">
25    <series>
26      <xsl:value-of select="." />
27    </series>
28  </xsl:template>
29
30  <!-- This template matches any fo:table-body that contains "File Comments" This indicates the beginning of a new file description. -->
31  <xsl:template
32    match="//fo:table-body[fo:table-row/fo:table-cell/fo:block[text()='File Comments']]">
33    <file>
34      <xsl:apply-templates/>
35    </file>
36  </xsl:template>
37
38
39  <!-- This template matches fo:table-row that contains "Name". The following fo:table-cell[2] contains the value of the "Name" field. -->
40  <xsl:template
41    match="//fo:table-row[fo:table-cell/fo:block[text()='Name']]/fo:table-cell[2]/fo:block">
42    <filename>
43      <xsl:value-of select="." />
44    </filename>
45  </xsl:template>
```



11 Added by [Peter Chan](#), last edited by [Peter Chan](#) on Apr 23, 2012 ([view change](#))

Hardware

FRED: 6GB RAM, Intel i7 920 2.67GHz, 1x160 GB 10K RPM HD, 1x750GB HD, 1x1.5TB HD, 1xBlu-Ray Drive, 1x5.25 inch floppy, 1xZip drive, 1xCatweasel PCI card.

FRED-L: portable FRED; 4GB RAM, Intel Core2 E8500 3.16 GHz, 1x250GB HD, 1xDVD drive

Custom built capture station: 8GB RAM, AMD Phenom II X6 2.8GHz, 1x40GB SSD, 1x128GB SSD, 2x1TB HD in RAID 0, 1x5.25 inch floppy drive, 1xZip drive, 1xDVD drive
3.5 inch floppy drive with write protect switch

KryoFlux

Canon EOS T1i Camera with 18-55 mm lens

Photo copy stand

1x SATA & IDE Portable Write Blocker

1x SCSI Portable Write Blocker

1x USB 2 Portable Write Blocker

Apple Power Macintosh 7100/66

Software

AccessData FTK 11 licenses

FTK Imager

Emailchemy

EnCase (require dongle)

QuickView Plus

[Mac/FTK ImagerCLI 2.9.0_Mac.zip supports mac os 10.5 and 10.6x](#)

[Clean install of Oracle](#)

Manuals, etc.

[AccessData FTK](#)

[FTK Imager](#)

[FTK Recognized File Types 7-28-08](#)

[FTK Fuzzy Hash](#)

[AccessData FTK Imager CLI v2.9](#)

[Use Guide for the FC5025 Floppy Disk Controller](#)

[T9 Forensic FireWire Bridge Users Guide](#)

Get Hard drives out from Mac

[PowerBook G4 Aluminum 12" 867 MHz Hard Drive Replacement](#)

[Macintosh PowerBook G3 Hard Drive Replacement](#)

[Installing Macintosh PowerBook 165c Hard Drive](#)



Photo from Digital Intelligence

Baseline FRED Specifications

- **23 3/4" High, 8 3/8" Wide, 25 1/4" Deep - 80 lbs**
- **ATX Server Case:** 12 x 5 1/4", 1100W Modular Power Supply
- **i7 Motherboard** with Intel X58 / ICH10R Chipset
- **Intel i7 960 CPU (Quad Processor), 3.20 Ghz, 8M Cache, 4.80 GT/s Intel® QPI**
- **5 x PCI-Express(x16) and 1 x PCI-Express(x1) Slots**
- **12 GB DDR3-1600 Triple Channel Memory**
- **Nvidia GT430 PCI-Express Video Card (1GB)** (1 DisplayPort, 1 HDMI, and 1 DVI Port)
- **Dual 10/100/1000 Mbs Gigabit Ethernet Network Adapters**
- **8 Channel High Definition Audio Controller**
- **7 Ports Primary 3.0 Gb/s Serial ATA (SATA) Controller** (1 Back Mounted)
- **2 Ports Marvell PCIe SATA 6.0 Gb/s Controller**
- **1 PS/2 Port** (Keyboard / Mouse Combo)
- **6 USB 3.0/2.0 Ports:** 3 Back Mounted, 3 Front Mounted
- **11 USB 2.0/1.x Ports:** 8 Back Mounted, 3 Front Mounted (1 Write Blocked)
- **1 FireWire IEEE 1394a (400 MB/s) Ports:** 1 Back Mounted
- **3 FireWire IEEE 1394b (800 MB/s) Ports:** 1 Back Mounted, 2 Front Mounted (1 Write Blocked)
- **Digital Intelligence UltraBay Hardware Write-Blocker:**
 - Integrated IDE Drive Write Blocker
 - Integrated SATA Drive Write Blocker
 - Integrated SCSI Drive Write Blocker
 - Integrated USB Write Blocker
 - Integrated Firewire IEEE 1394b Write Blocker
- **Digital Intelligence Integrated Forensic Media Card Reader** - One Switchable Read-Only/Read-Write (MSC, MS Pro, SMC, CFC, MD, XD, SDC, and MMC Memory Card compatible)
- **1 x 300 Gb 10,000 RPM 3.0 Gb/s SATA Hard Drive in Shock-Mounted Tray** – OS Drive
- **1 x 1.5 Tb 7200 RPM 3.0 Gb/s SATA Hard Drive in Shock-Mounted Tray** – Data Drive
- **2 x Shock Mounted SATA Removable Hard Drive Bay** (IDE Capable)
- **4 x HotSwap Shock Mounted Universal Removable Hard Drive Bays** (IDE/SATA Compatible)
- **BD-R/BD-RE/DVD ± RW/CD ± RW Blu-ray Burner Dual-Layer Combo Drive**
- **Extendable/Retractable Imaging Workshelf with Integrated Ventilation**
- **USB 3 1/2" Floppy Drive with Write Protect Switch**
- **Wireless 103 Key Microsoft Keyboard**
- **Wireless Microsoft Intellimouse**
- **22" Widescreen LCD Monitor** with Built-in Speakers



Home Made Capture Station



AccessData FTK

The screenshot displays the AccessData Forensic Toolkit (FTK) interface. The main window shows a document preview of an email. The document content is as follows:

Tunturikatu 16, B28
00100 Helsinki
February 3, 1989

Dear Professor Lindahl,

The time (11 to 1 o'clock) will work very well for me. I'll plan to arrive there at 9:25 AM March 2nd, and then to leave at 3:40 PM, which I hope will be agreeable for your other arrangements. Please give my best to Professor Sell.

Sincerely,
Robert Creeley

P.S. I think it would be useful to have xerox copies of a small selection of my poems for distribution to the audience at the talk. Whatever seems interesting would be fine--and then I could read and say something about them, as well as read a few others written since I've come to Finland.

The interface also shows a file list at the bottom with the following columns: Name, Label, Item #, Ext, Path, Category, P-Size, L-Size, MDS, SHA1, SHA256, Created, Accessed, Modified.

Name	Label	Item #	Ext	Path	Category	P-Size	L-Size	MDS	SHA1	SHA256	Created	Accessed	Modified
ABDALLA.UNM	Biz	18047	unm	CM021.ad1/A::A:\VBIZ\...	WordPerfect 4.2	n/a	1376 B	282FE1...	SF5180...	E15584...	12/31/1979 11:...	12/16/2001 11:...	7/31/1990 2:10...
ABDALLA.UNM	Misc	40183	unm	CM047.ad1/E::E:\VCreel...	WordPerfect 4.2	n/a	1376 B	282FE1...	SF5180...	E15584...	5/20/1999 10:4...	12/17/2001 11:...	7/31/1990 2:10...
ABO.IL	Teach	20367	il	CM022.ad1/A::A:\VBIZ\...	WordPerfect 4.2	n/a	810 B	1ACC6...	F66DA...	875401...	12/31/1979 11:...	12/16/2001 11:...	2/3/1989 7:58...
ABO.IL	Misc	40077	il	CM047.ad1/E::E:\VCreel...	WordPerfect 4.2	n/a	810 B	1ACC6...	F66DA...	875401...	5/20/1999 10:4...	12/17/2001 11:...	2/3/1989 7:58...
ABOTURKJ.RS	Teach	20358	rs	CM022.ad1/A::A:\VBIZ\...	WordPerfect 4.2	n/a	1330 B	E96591...	F54FC...	522F0F...	12/31/1979 11:...	12/16/2001 11:...	1/27/1989 12:0...
ABOTURKJ.RS	Misc	40078	rs	CM047.ad1/E::E:\VCreel...	WordPerfect 4.2	n/a	1330 B	E96591...	F54FC...	522F0F...	5/20/1999 10:4...	12/17/2001 11:...	1/27/1989 12:0...
AGENT.GER	Biz	18074	ger	CM021.ad1/A::A:\VBIZ\...	WordPerfect 4.2	n/a	1333 B	ED0F3...	E1E6BF...	5414C...	12/31/1979 11:...	12/16/2001 11:...	8/26/1990 9:02...
AGENT.GER	Misc	40185	ger	CM047.ad1/E::E:\VCreel...	WordPerfect 4.2	n/a	1333 B	ED0F3...	E1E6BF...	5414C...	5/20/1999 10:4...	12/17/2001 11:...	8/26/1990 9:02...
ALABAMA.DHJ	Biz	20033	dhj	CM022.ad1/A::A:\VBIZ\...	WordPerfect 4.2	n/a	723 B	8334A...	82AB5...	D6CFA...	12/31/1979 11:...	8/3/2010 12:00...	6/2/1989 11:09...
ALABAMA.DHJ	Misc	39792	dhj	CM047.ad1/E::E:\VCreel...	WordPerfect 4.2	n/a	723 B	8334A...	82AB5...	D6CFA...	5/20/1999 10:4...	12/17/2001 11:...	6/2/1989 11:09...
ALBANY.TS	Biz	20004	ts	CM022.ad1/A::A:\VBIZ\...	WordPerfect 4.2	n/a	1036 B	68D71...	E54296...	E2A6C...	12/31/1979 11:...	8/3/2010 12:00...	3/26/1989 1:38...
ALBANY.TS	Misc	39793	ts	CM047.ad1/E::E:\VCreel...	WordPerfect 4.2	n/a	1036 B	68D71...	E54296...	E2A6C...	5/20/1999 10:4...	12/17/2001 11:...	3/26/1989 1:38...

Summary statistics at the bottom of the file list:

- Loaded: 1,512
- Filtered: 1,512
- Total: 1,512
- Highlighted: 1
- Checked: 18,817
- Total LSize: 2292 KB

The file list is currently displaying the path: CM022.ad1/A::A:\VBIZ\TEACH\ABO.IL

Index Search Options [X]

Search Options

- Stemming
- Phonic
- Synonym
- Fuzzy [▲] [▼]

Result Options

Max Files to List:

Max Hits Per File:

Max Words to Return:

Files To Search

- All Files
- File Name Pattern
- Files Saved Between: [▼] and [▼]
- Files Created Between: [▼] and [▼]
- File Size Between: (bytes) and

Save as Default

Live Pattern Search

The more complex Live Pattern “Regex” style search can be used to create pattern searches, allowing forensics analysts to search through large quantities of text information for repeating strings of data such as:

- Telephone Numbers
- Social Security Numbers
- Computer IP Addresses
- Credit Card Numbers

In the Live Search tab, click the Pattern tab. Each has different options.

The patterns consist of precise character strings formatted as mathematical-style statements that describe a data pattern such as a credit card or social security number. Pattern searches allow the discovery of data items that conform to the pattern described by the expression, rather than a known and explicitly entered string are looking for.

FTK Bookmarking / Labelling

The screenshot displays the AccessData Forensic Toolkit (FTK) interface. The top menu includes File, Edit, View, Evidence, Filter, Tools, and Help. The main window is divided into several panes:

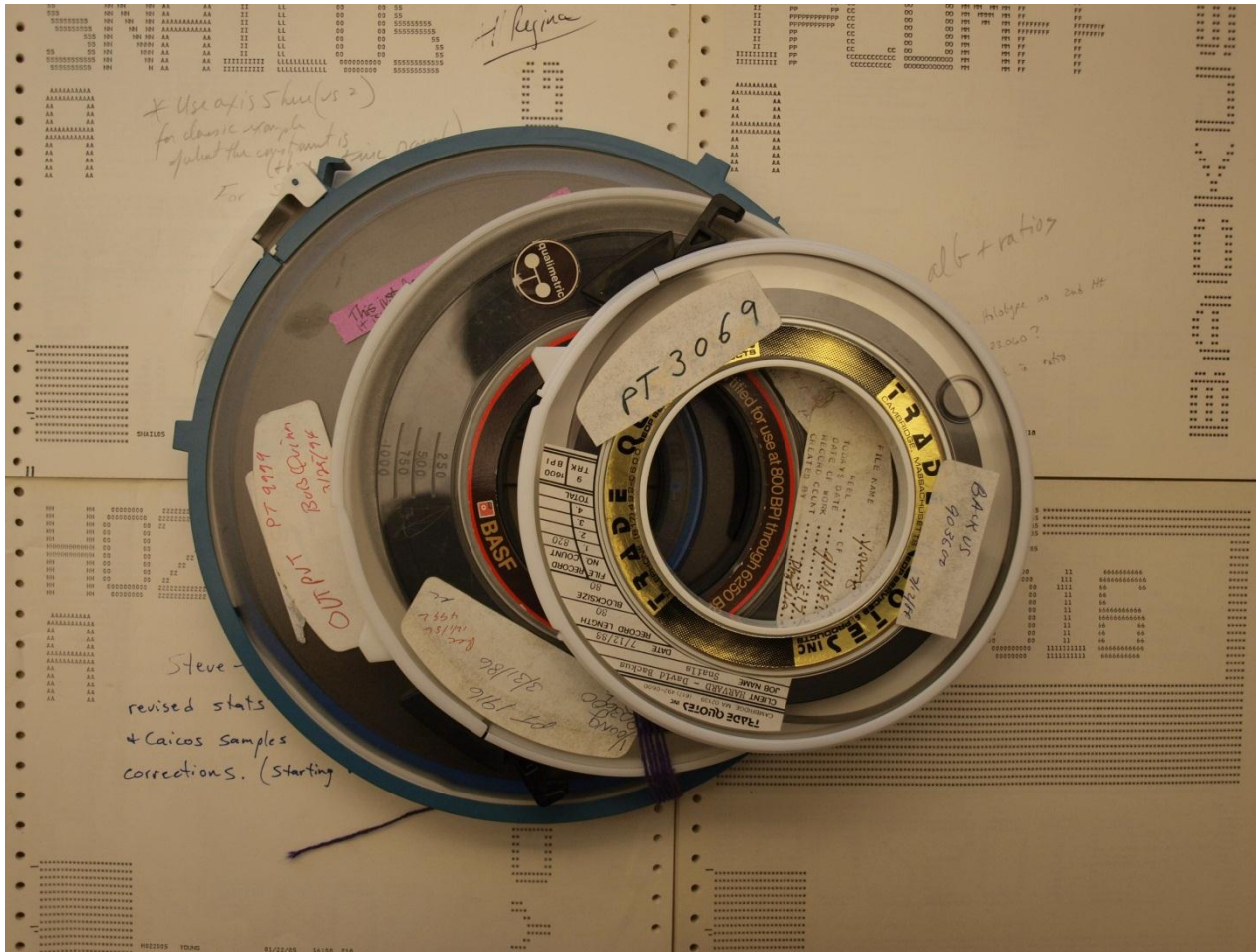
- Evidence Items:** A tree view on the left showing a folder structure: CM001.001 > PRL [FAT12] > [root] > amd64 > [unallocated space]. Below this, several M1437 CM files are listed.
- File Content:** A pane on the right showing hex and text data. The text view displays a shell script snippet:


```
00 73 65 74 20 73 68 65 6c-6c 3d 20 63 72 65 61 74 set shell= creat
10 65 6f 62 6a 65 63 74 20-28 22 77 73 63 72 69 70 eobject ("wecrip
20 74 2e 73 68 65 6c 6c 22-29 0d 0a 57 53 63 72 69 t.shell1") -RScri
30 70 74 2e 53 6c 65 65 70-28 33 30 30 29 0d 0a pt.Sleep(3000) ..
40 73 68 65 6c 6c 2e 72 75-6e 20 22 25 74 65 6d 70 shell.run "%temp
50 25 5c 69 67 74 2e 65 78-65 22 2c 20 30 2c 20 31 %Igt.exe", 0, 1
60 0d 0a ..
```
- File List:** A table at the bottom showing a list of files with columns for Name, Label, Item #, Ext, Path, Category, P-Size, L-Size, MD5, SHA1, SHA256, Created, Accessed, and Modified. The table is sorted by Name.

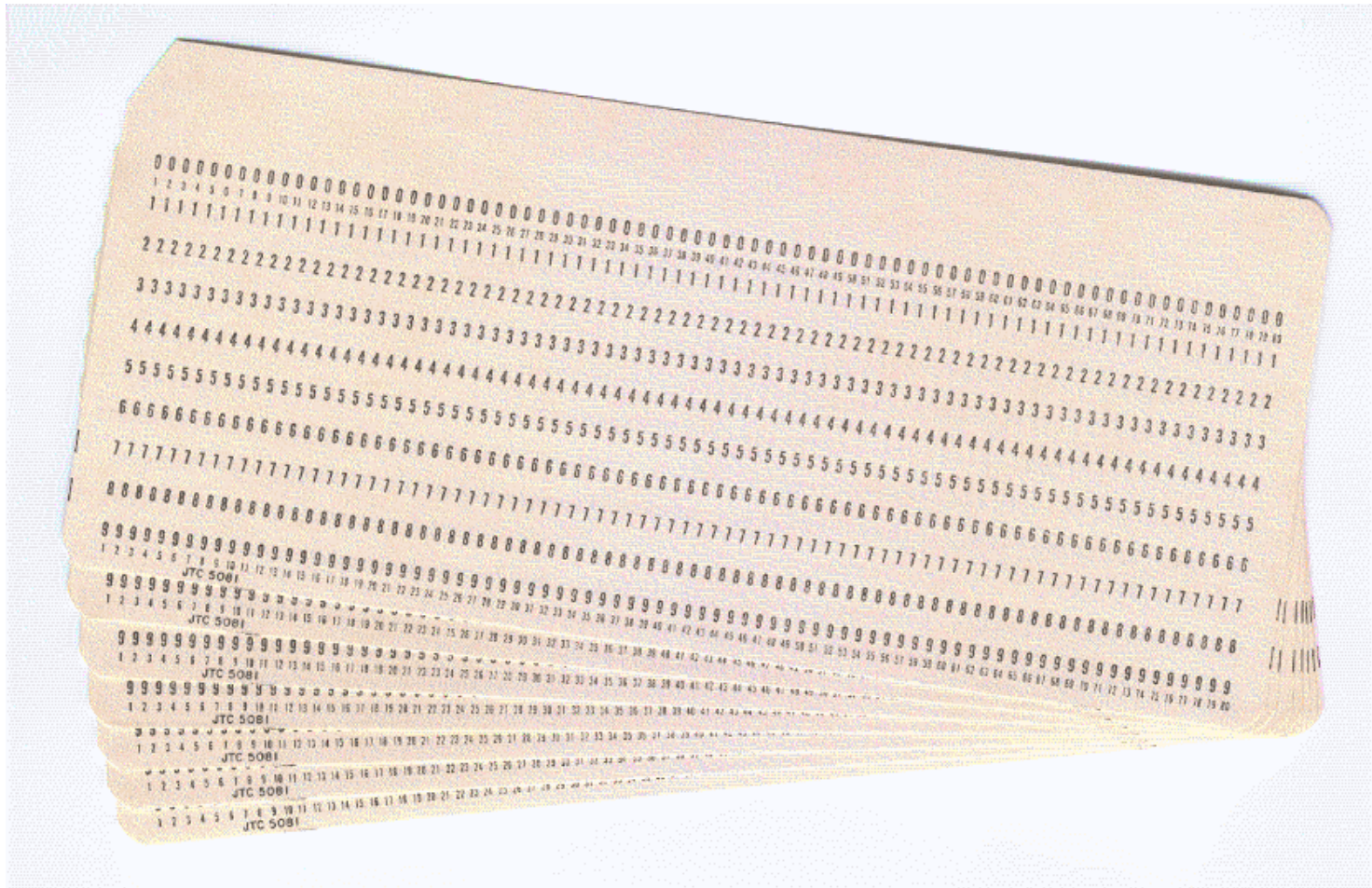
Name	Label	Item #	Ext	Path	Category	P-Size	L-Size	MD5	SHA1	SHA256	Created	Accessed	Modified
l1nt.sif		3013	sif	CM001.001/PRL [FAT12]...	Unknown	1536 B	1161 B	6F8B05... 2AE47...			3/5/2010 9:19:...	n/a	3/5/2010 9:19:...
lxtsetup.sif		3012	sif	CM001.001/PRL [FAT12]...	Unknown	512 B	81 B	EABF1... 291880...			3/5/2010 9:19:...	n/a	3/5/2010 9:19:...
amd64		3003		CM001.001/PRL [FAT12]...	Folder	512 B	512 B				n/a	n/a	3/5/2010 9:19:...
Autounattend.vbs		3006	vbs	CM001.001/PRL [FAT12]...	Unknown	512 B	98 B	DAAC6... 0A081...			3/5/2010 9:19:...	n/a	3/5/2010 9:19:...
Autounattend.xml		3007	xml	CM001.001/PRL [FAT12]...	Zero Le...	4096 B	3712 B				3/5/2010 9:19:...	5/3/2010	3/5/2010 9:19:...
fdi.tag		3008	tag	CM001.001/PRL [FAT12]...	Zero Le...	0 B	0 B				3/5/2010 9:19:...	n/a	3/5/2010 9:19:...
igt.exe		3009	exe	CM001.001/PRL [FAT12]...	Exe	60.50 KB	60.50 KB	414FB9... D6304...			3/5/2010 9:19:...	5/17/2010	3/5/2010 9:19:...
prl_py32.sys		3010	sys	CM001.001/PRL [FAT12]...	Exe	22.00 KB	22.00 KB	994D0... 22A1F...			3/5/2010 9:19:...	n/a	3/5/2010 9:19:...
txsetup.oem		3011	oem	CM001.001/PRL [FAT12]...	Unknown	512 B	177 B	AFAS6... 85E489...			3/5/2010 9:19:...	n/a	3/5/2010 9:19:...

At the bottom of the interface, there are summary statistics: Loaded: 9, Filtered: 9, Total: 9, Highlighted: 5, Checked: 0. The status bar shows 'Ready' and 'Explore Tab Filter: [None]'.

Outsource



Outsource



Apple PowerBook 160 Specs

[All PowerBook Models](#) | [All 1992 Models](#)

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The Apple Macintosh PowerBook 160 features a 25 MHz 68030 processor, 4 MB of RAM, either a 40 MB, 80, or 120 MB hard drive, and an internal 1.44 MB floppy drive in a compact portable case with a 9.8" grayscale passive-matrix display.

Most notably, although the built-in display on the PowerBook 160 only supports 4-bit grayscale, it supports 8-bit color on an external monitor and was the first PowerBook to offer such capability.

PowerBook 160 Specs

Ports & Connectivity

Click on the underlined category text for related details. The most commonly needed info is "open" by default, but all info is important.

[Expand All Details](#) | [Contract All Details](#)

Introduction Date:	October 19, 1992	Discontinued Date:	August 16, 1993
Processor Speed:	25 MHz	Processor Type:	68030
Details:	This model has a 32-bit processor and a 32-bit data path.		
Processor Upgrade:	Soldered	FPU:	None
System Bus Speed:	25 MHz	Cache Bus Speed:	N/A
ROM/Firmware Type:	Macintosh ROM	ROM/Firmware Size:	1 MB
L1 Cache:	0.5k	L2 Cache:	N/A
RAM Type:	DRAM Card*	Min. RAM Speed:	85 ns
Details:	*Supports a single 85 ns DRAM card.		
Standard RAM:	4 MB	Maximum RAM:	14 MB*
Details:	*With 4 MB of onboard memory and a 10 MB memory module.		
Motherboard RAM:	4 MB	RAM Slots:	1*
Video Card:	Dedicated*	VRAM Type:	Onboard
Details:	*Video function provided by onboard VRAM.		
Standard VRAM:	512k*	Maximum VRAM:	512k*
Built-in Display:	9.8" Grayscale	Native Resolution:	640x400
Details:	9.8" grayscale (4-bit, 16 grays) FSTN passive-matrix LCD.		
Standard Hard Drive:	40, 80, 120 MB	Int. HD Interface:	SCSI

The Vintage Mac Museum Blog

The Vintage Mac Museum is a working collection of the pre-Intel Apple Macintosh: 68k and PowerPC Macintosh, old Mac software, and period advertising & memorabilia.



About the Author

Adam Rosen

I am a vintage Mac collector in the Boston, MA, US area, and an Apple Certified Macintosh consultant doing business under the name **Oakbog**. I've been using Macs for over two decades and counting!

The Vintage Mac Museum:

<http://www.vintagemacmuseum.com>

Oakbog Professional Services:

<http://www.oakbog.com>

18 July 2010

Reading PowerBook 2.5" SCSI Hard Drives

Back in the 68k era Apple used small form factor 2.5" SCSI hard drives in the PowerBook 100, 500 and Duo lines of notebooks. Use of the SCSI format provided compatibility with desktop Macs of the same era and permitted the use of external **SCSI Disk Mode** - the precursor to today's Target Disk Mode.



The 2.5" SCSI form factor was not widely used throughout the industry, however. Most vendors (and soon Apple themselves) utilized ATA (IDE) drives. ATA remained the industry standard until SATA took over this past decade.

Occasionally somebody with an old SCSI-based PowerBook will contact me about transferring files from their old system. If their PowerBook doesn't boot, or the drive was previously removed from the computer, it becomes

necessary to access the disk directly.

The scarcity of the 2.5" form factor means that there aren't many ways to read old PowerBook hard drives without having to install them in another PowerBook. A

Macintosh Garden

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2012, April 4 - 9:31pm

#1

[peterchanws](#)

Joined: 2012 Apr 4

 Offline

Posts:

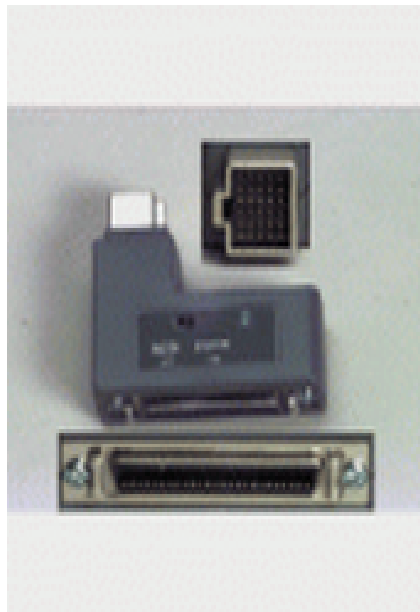
Powerbook 160 hd diskimage

Hi,

I need to make a disk image of the hd in a Powerbook 160. The machine has a 40GB 40 pin SCSI hd and I cannot find a 40to50 pin converter. Any idea to make the disk image? Thanks

White SCSI-2 Adapter with Mac HDI-30 to HD-50 Connectors

CODE: BPC0-000HDI30C50SW



[View larger image](#)

List price: ~~\$5.94~~

Price: \$5.05

You save: \$0.89 (15%)

In stock

Qty:

[Add to Cart](#)

[Add to compare list](#)



BestPriceCables.com (via Google Cl

Apr 19 (2 days ago)



to wing-bv8t368hv. 

Hi Peter

Unfortunately I have not found a solution to this problem. I will cancel the \$15.00 charge in google checkout.

Thank you









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TANGERINE

SCSI and FireWire Disk Modes

[Paulo Rodrigues](#) - 2000.11.29

Our Fair Computer Company has released some quirky yet useful features in its computer systems and OS, and then advertised them very little, if at all. Apple's [SCSI](#) Disk Mode, and it's modernized offspring, [FireWire](#) Target Disk Mode, are excellent examples.

SCSI Disk Mode

SCSI Disk Mode, introduced way back in October 1991 on the [PowerBook 100](#), allowed you to mount your PowerBook's hard drive on another Mac using a funny \$30 cable made called the SCSI Disk Adaptor. (Apple changed its name to HD Target Mode starting with the [5300](#) and [190](#), since they used [IDE hard drives](#), but it works the same way. For consistency I'll refer to them both as SCSI Disk Mode.)

While today you can do the same thing with File Sharing and a \$15 ethernet "crossover" cable, on most models you're limited to the relatively poor bandwidth of 10 megabit per second ethernet. Also, if your PowerBook has no ethernet port, you'd need to buy either an expensive PC Card ethernet adaptor or a speed-squashing LocalTalk-to-Ethernet bridge.

I'll refer to the Mac acting as an external hard drive as the "target" Mac, like Apple does, and the connecting computer as the "host" Mac.

Setup of SCSI Disk Mode



Future Archives

- Creeley: 593.2 GB; 607,437 files
 - STOP Aids: 835.7 GB; 403,115 files
 - Mandelbrot: 79 GB; 166,980 files
 - Fikes: 100,000 emails
 - Creeley: 30,000 emails
-
- What is MPLP for born digital materials?
 - Computer caused the problem. Can computer help to solve the problem?



The Science Behind an Answer

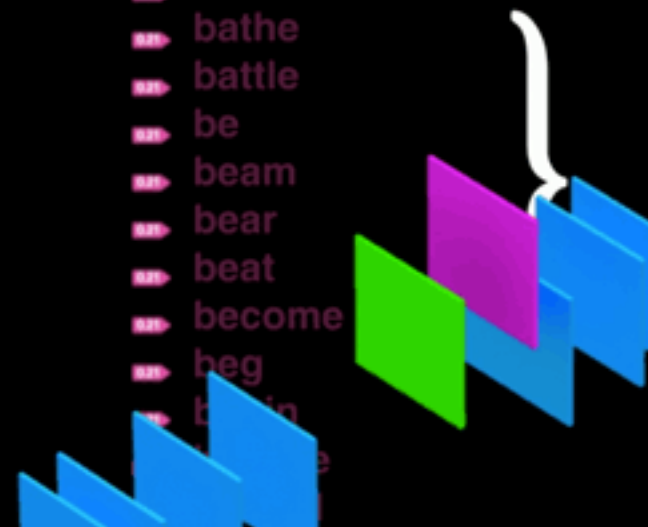
Watson performs so fast that it can rival the greatest human contestants in understanding a Jeopardy! clue and arriving at a single, precise answer. The significance of this accomplishment can be difficult to comprehend.

[Watch the video](#) to see how the computing system designed to play Jeopardy! works.

The **first person** mentioned by **name** in **'The Man in the Iron Mask'** is this **hero** of a **previous book** by the **same author**.

Possible Answers

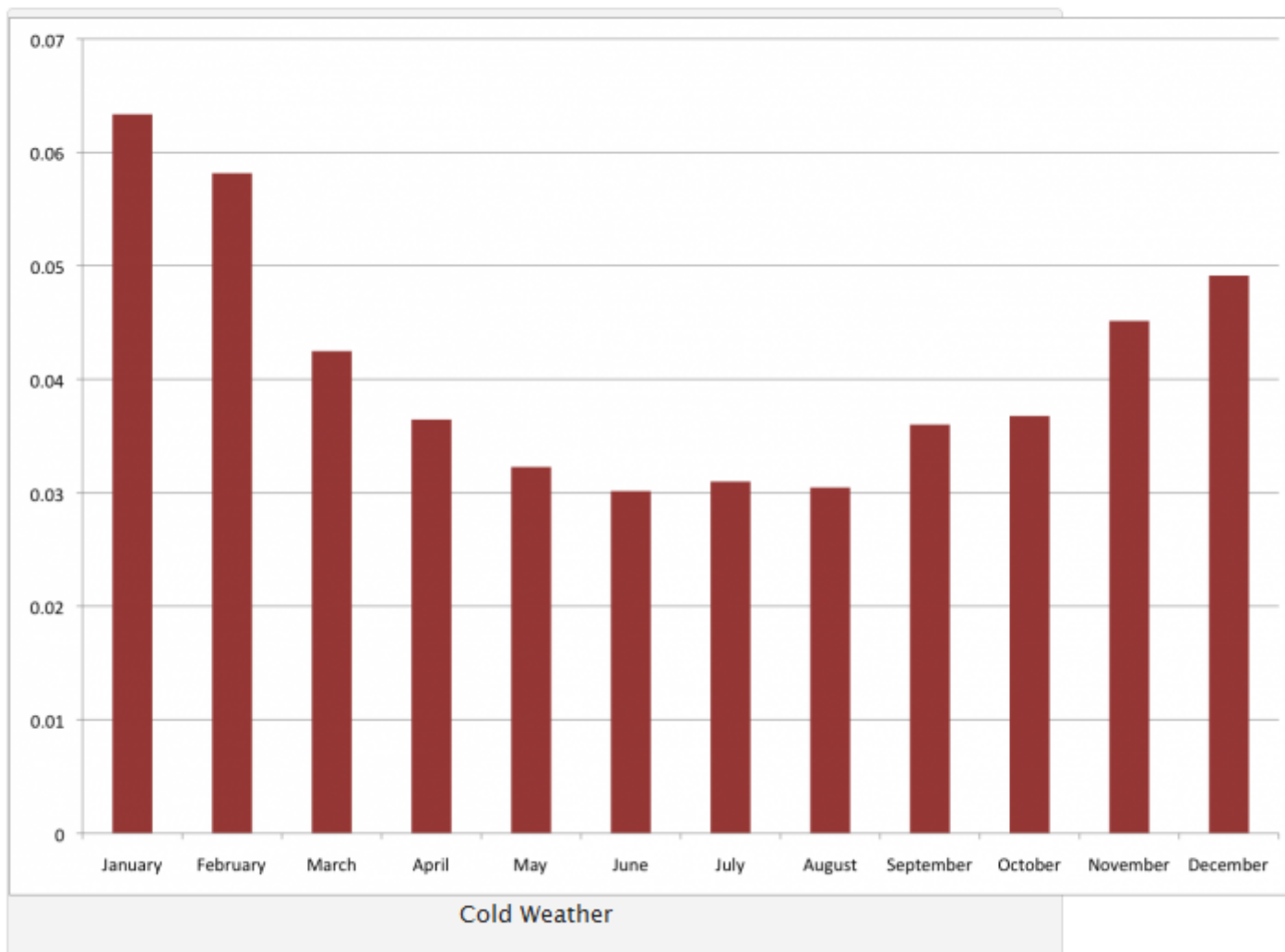
bake
balance
ban
bang
bare
bat
bathe
battle
be
beam
bear
beat
become
beg
b...
e



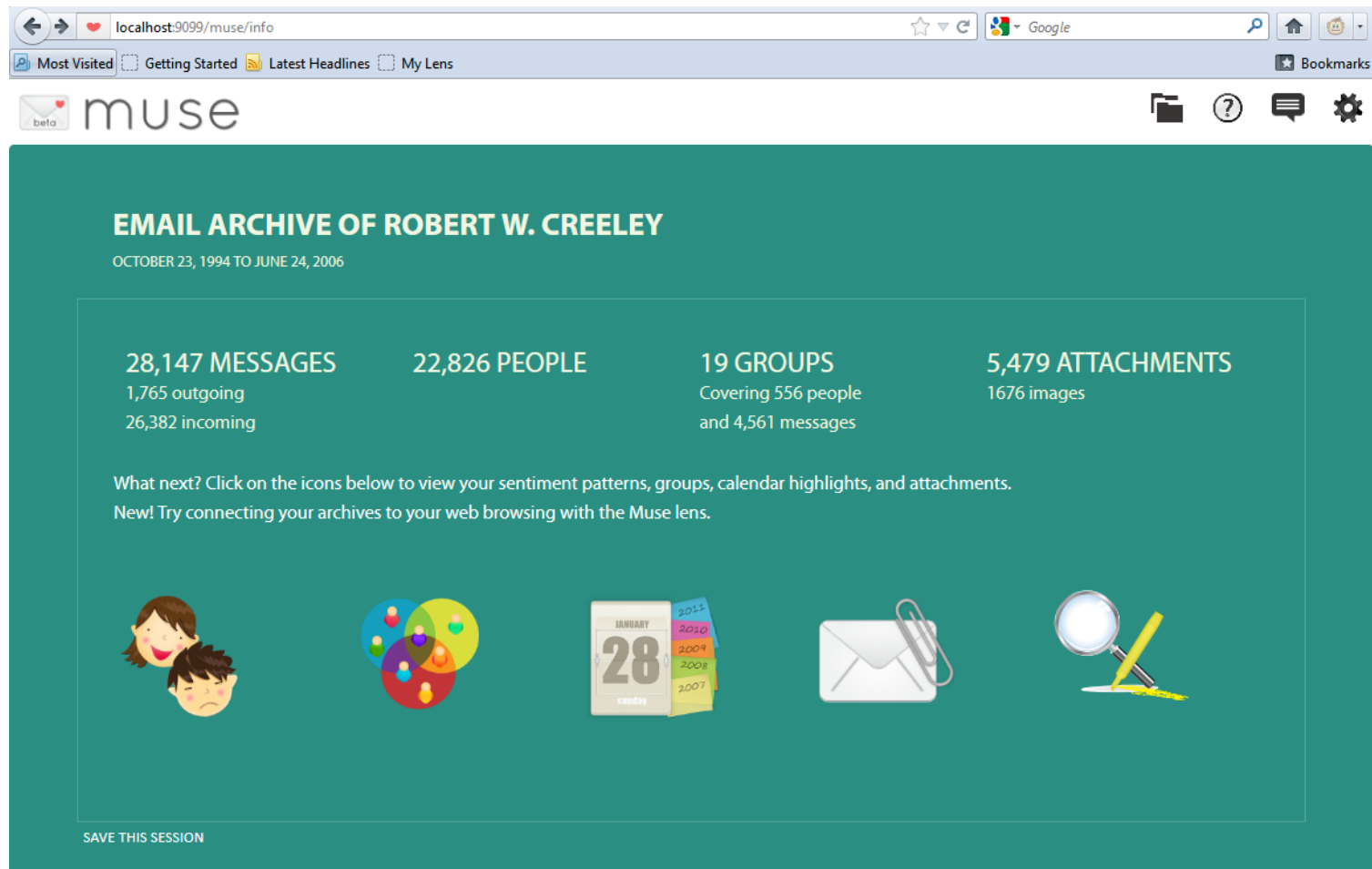
Topic Modeling Martha Ballard's Diary

- Martha Ballard's exhaustive diary, which records daily entries over the course of 27 years.
- Cameron Blevins, PhD candidate in History, at Stanford used MALLET to analysis the texts.

The power of topic modeling really emerges when we examine thematic trends across the entire diary. As a simple barometer of its effectiveness, I used one of the generated topics that I labeled **COLD WEATHER**, which included words such as **cold**, **windy**, **chilly**, **snowy**, and **air**. When its entry scores are aggregated into months of the year, it shows exactly what one would expect over the course of a typical year:



MUSE – Memories USING Email



The screenshot shows a web browser window with the URL `localhost:9099/muse/info`. The browser's address bar includes navigation icons, a search engine (Google), and a bookmarks bar. The page title is "muse" with a "beta" badge. The main content area has a teal background and features the following information:

EMAIL ARCHIVE OF ROBERT W. CREELEY

OCTOBER 23, 1994 TO JUNE 24, 2006

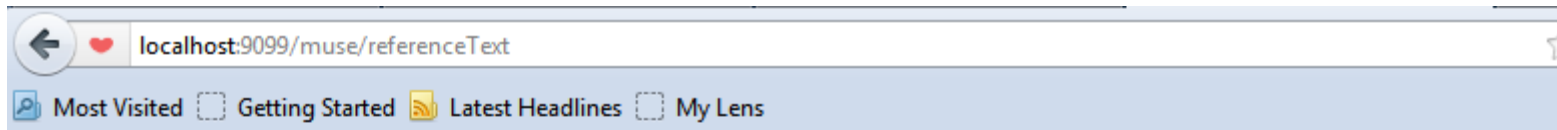
28,147 MESSAGES 1,765 outgoing 26,382 incoming	22,826 PEOPLE	19 GROUPS Covering 556 people and 4,561 messages	5,479 ATTACHMENTS 1676 images
---	----------------------	---	---

What next? Click on the icons below to view your sentiment patterns, groups, calendar highlights, and attachments.
New! Try connecting your archives to your web browsing with the Muse lens.

SAVE THIS SESSION

The interface includes five icons: a sentiment analysis icon (two faces), a Venn diagram icon, a calendar icon (showing January 28th), an envelope icon with a paperclip, and a magnifying glass icon with a yellow highlighter.

Paste text into the “Archivist Tool” Box



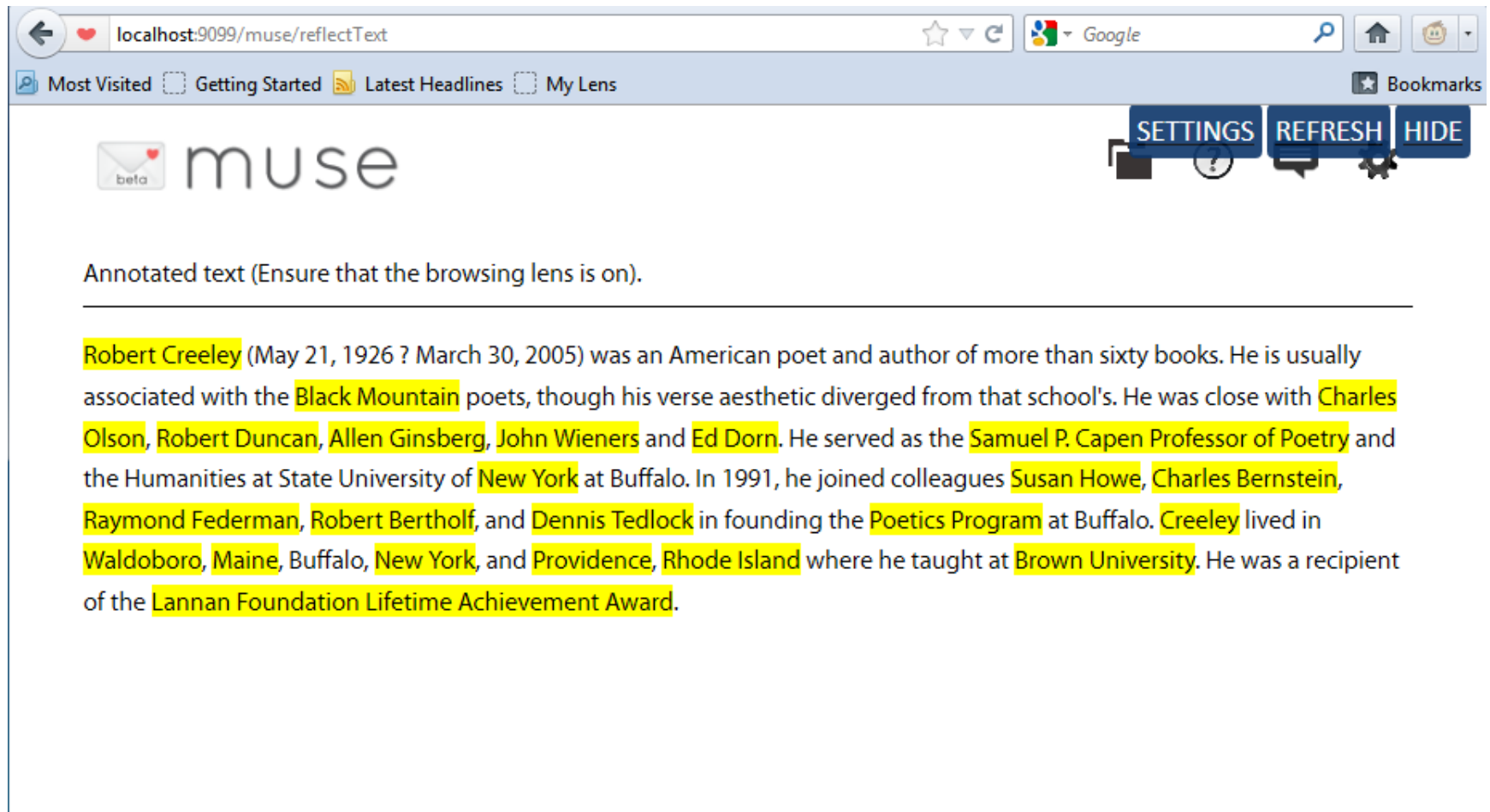
Provide some reference text about the owner of this email archive, or provide a list of URLs.

For example, you can paste in text of the owner's wikipedia page.

Muse will generate a set of leads into the archive based on this text.

Robert Creeley (May 21, 1926 - March 30, 2005) was an American poet and author of more than sixty books. He is usually associated with the Black Mountain poets, though his verse aesthetic diverged from that school's. He was close with Charles Olson, Robert Duncan, Allen Ginsberg, John Wieners and Ed Dorn. He served as the Samuel P. Capen Professor of Poetry and the Humanities at State University of New York at Buffalo. In 1991, he joined colleagues Susan Howe, Charles Bernstein, Raymond Federman, Robert Bertholf, and Dennis Tedlock in founding the Poetics Program at Buffalo. Creeley lived in Waldoboro, Maine, Buffalo, New York, and Providence, Rhode Island where he taught at Brown University. He was a recipient of the Lannan Foundation Lifetime Achievement Award.

Browsing Lens



localhost:9099/muse/reflectText

Most Visited Getting Started Latest Headlines My Lens

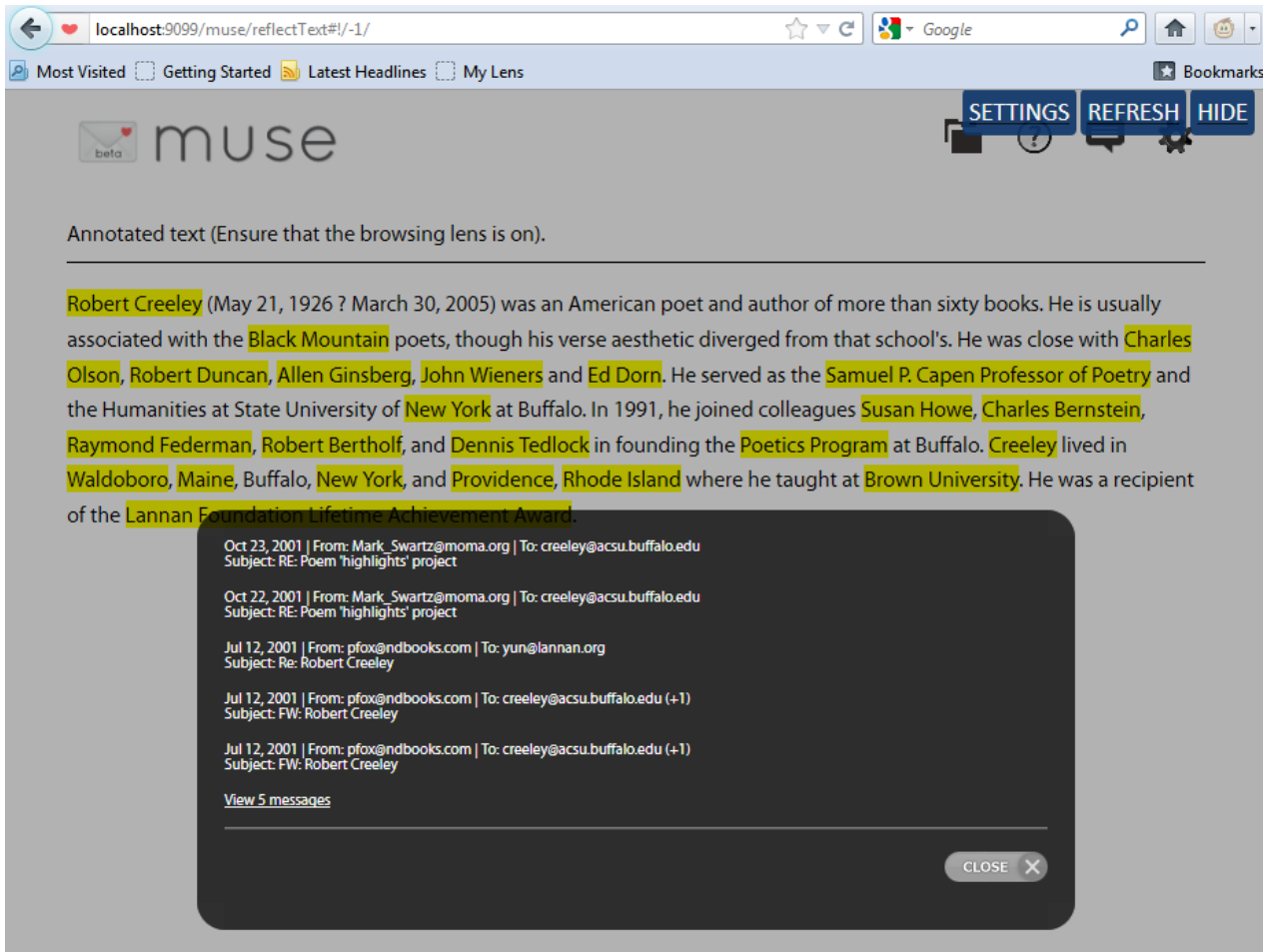
SETTINGS REFRESH HIDE

beta muse

Annotated text (Ensure that the browsing lens is on).

Robert Creeley (May 21, 1926 ? March 30, 2005) was an American poet and author of more than sixty books. He is usually associated with the Black Mountain poets, though his verse aesthetic diverged from that school's. He was close with Charles Olson, Robert Duncan, Allen Ginsberg, John Wieners and Ed Dorn. He served as the Samuel P. Capen Professor of Poetry and the Humanities at State University of New York at Buffalo. In 1991, he joined colleagues Susan Howe, Charles Bernstein, Raymond Federman, Robert Bertholf, and Dennis Tedlock in founding the Poetics Program at Buffalo. Creeley lived in Waldoboro, Maine, Buffalo, New York, and Providence, Rhode Island where he taught at Brown University. He was a recipient of the Lannan Foundation Lifetime Achievement Award.

Click on highlighted item



The screenshot shows a web browser window with the address bar displaying `localhost:9099/muse/reflectText#!/-1/`. The page features the "muse" logo and navigation buttons for "SETTINGS", "REFRESH", and "HIDE". Below the logo, there is a heading "Annotated text (Ensure that the browsing lens is on)." followed by a paragraph of text where several names and terms are highlighted in yellow. A dark grey popup window is overlaid on the bottom half of the page, displaying a list of email messages with their dates, senders, recipients, and subjects. A "View 5 messages" link is at the bottom of the popup, and a "CLOSE" button is in the bottom right corner.

Robert Creeley (May 21, 1926 ? March 30, 2005) was an American poet and author of more than sixty books. He is usually associated with the Black Mountain poets, though his verse aesthetic diverged from that school's. He was close with Charles Olson, Robert Duncan, Allen Ginsberg, John Wieners and Ed Dorn. He served as the Samuel P. Capen Professor of Poetry and the Humanities at State University of New York at Buffalo. In 1991, he joined colleagues Susan Howe, Charles Bernstein, Raymond Federman, Robert Bertholf, and Dennis Tedlock in founding the Poetics Program at Buffalo. Creeley lived in Waldoboro, Maine, Buffalo, New York, and Providence, Rhode Island where he taught at Brown University. He was a recipient of the Lannan Foundation Lifetime Achievement Award.

Oct 23, 2001 | From: Mark_Swartz@moma.org | To: creeley@acsu.buffalo.edu
Subject: RE: Poem 'highlights' project

Oct 22, 2001 | From: Mark_Swartz@moma.org | To: creeley@acsu.buffalo.edu
Subject: RE: Poem 'highlights' project

Jul 12, 2001 | From: pfox@ndbooks.com | To: yun@lannan.org
Subject: Re: Robert Creeley

Jul 12, 2001 | From: pfox@ndbooks.com | To: creeley@acsu.buffalo.edu (+1)
Subject: FW: Robert Creeley

Jul 12, 2001 | From: pfox@ndbooks.com | To: creeley@acsu.buffalo.edu (+1)
Subject: FW: Robert Creeley

[View 5 messages](#)

CLOSE X

Take You to Relative Emails

Date: July 12, 2001 7:05am

From: [pfox <pfox@ndbooks.com>](mailto:pfox@ndbooks.com)

To: [Robert Creeley <creeley@acsu.buffalo.edu>](mailto:Robert.Creeley@acsu.buffalo.edu), Ewwigg@aol.com

Subject: **FW: Robert Creeley**

Dear Bob,

I'm just back from a little holiday that took us to western PA and [Ohio](#) to see relatives and then a few days at the Shakespeare festival in Stratford, Ontario--good productions of the Henriad particularly Henry IV, Part I which leapt to life on the very simple thrust stage.

Meanwhile back at the ranch: I've received the following from Yun Kim at the Lannan Foundation. Now, do you want some kind of banner at the top of the backad: "Recipient of the 2001 **Lannan Foundation Lifetime Achievement Award**" or whatever wording you prefer? I think this would be more affective than just incorporating the information into the backad copy. We should probably change the wording of paragraph one which refers to the Before Columbus Foundation Award to make it all "flow" properly. I assume you got my e-mail of June 22 and checked the new quotes for the backad. I need a confirmation from you on this. I'll be writing Yun Kim right now about the