

WISCONSIN
HISTORICAL
SOCIETY

Tools to Manage Digital Content



Agenda

- Overview
- Managing your E-Records
- Tools you can use
- WHS website resources
- Checksums
- Inventories
- Digitization project management



What is Digital Content?

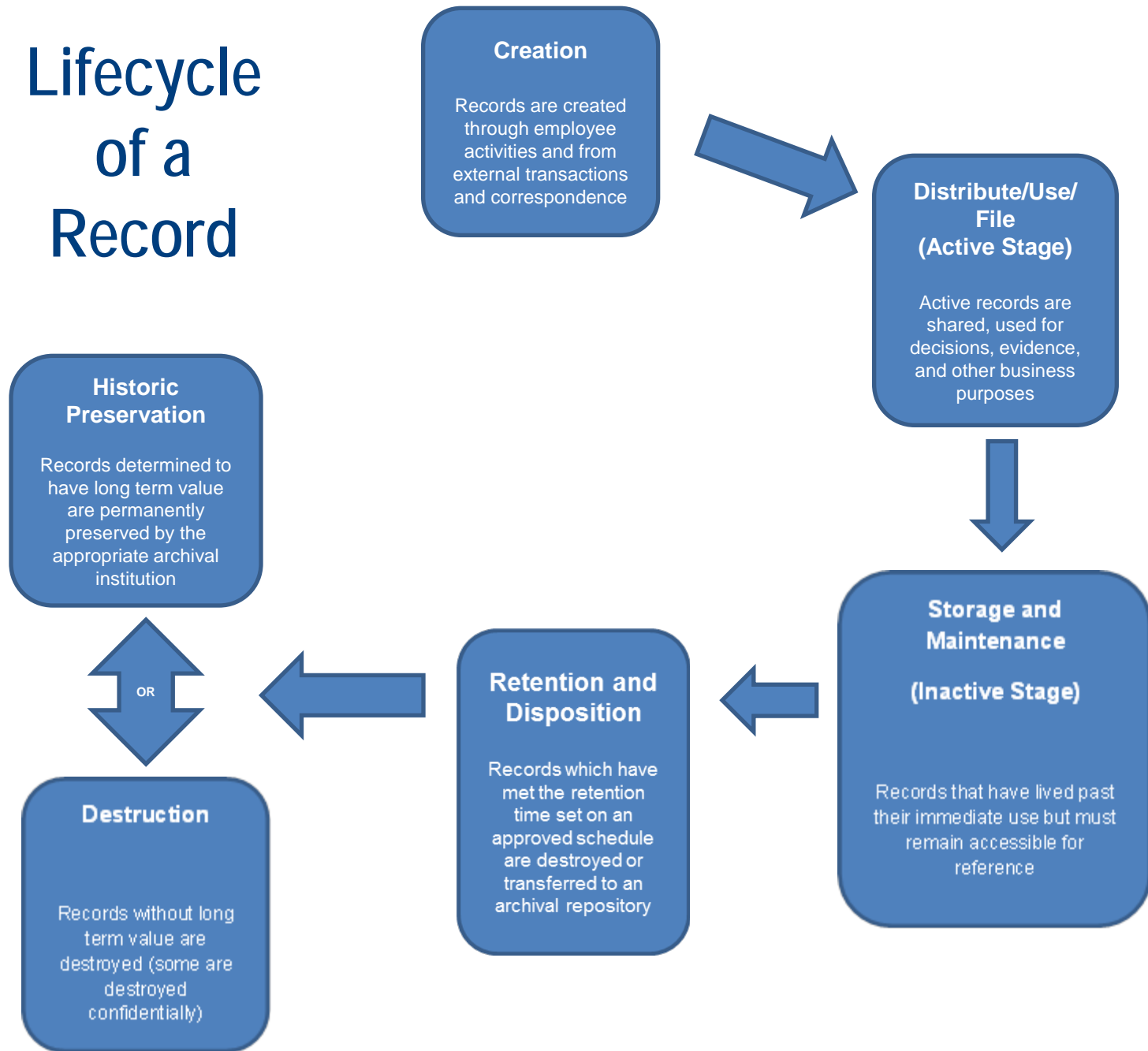
- Digital content is any content that is published or distributed in a digital form, including text, data, sound recordings, photographs and images, motion pictures, and software.
 - Digital materials created from analogue sources
 - Born-digital content
- Digital materials you currently have or create – or expect to have – that you want to preserve.

Digital Reality in 2017



Source: Archives New Zealand
Digital Continuity Action Plan

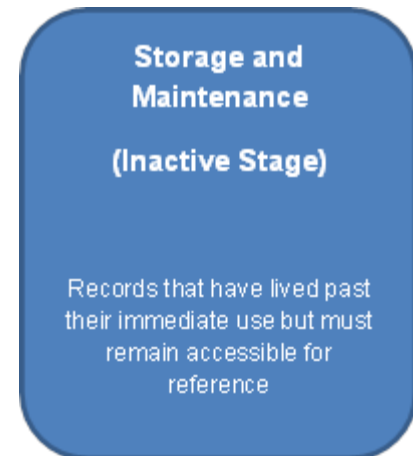
Lifecycle of a Record



Managing Your Records

Establish for your organization:

- How you manage & organize files
 - Share Drives
 - Personal Drives
 - CMS / Sharepoint / etc
- File naming standards
- Organize photo collections



File Naming

- Why is this important?
 - To prevent accidental overwriting
 - To help you find it again



Train Wreck Image ID: WHi-2011

- Don't use special characters in your file/folder titles
(^" < > | ? \ / : @ ' * &)
..... Just because you **CAN** doesn't mean you **SHOULD**

File Naming

- Keep folder / document titles short and descriptive
- Date your documents consistently
 - *yyyymmdd_brieftitle.xxx*
- Clearly label drafts and revisions



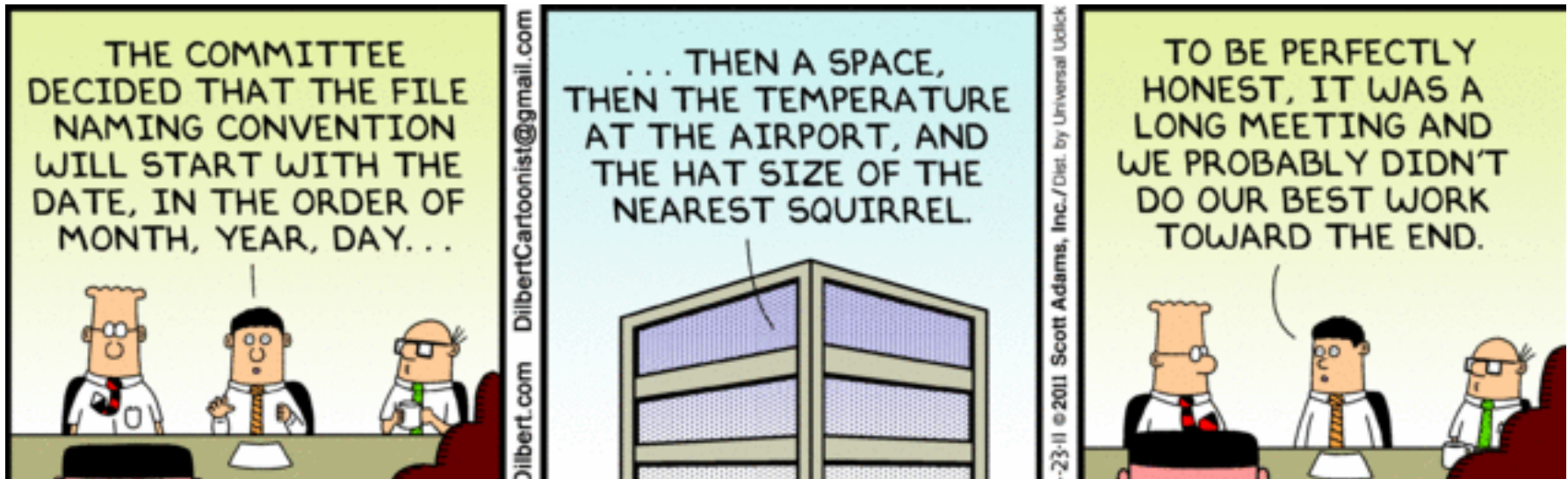
File Management

- Store similar digital items together
 - Co-locate in a central location
- Don't bury items in multiple levels
- Get rid of easy-to-purge items
 - Rescued or recovered documents
 - Empty file folders
 - ~.tmp files

File Management

- Make decisions about what **NOT** to keep
 - File backups/copies/drafts
 - Supplementary files that provide no additional long-term value
 - Corrupted files
 - Certain file formats
- Leave breadcrumbs

Document Those Decisions



Create documents standardizing:

- File naming conventions
- Folder organization
- Acceptable formats

Tools to Help Manage Files

- Remove empty directories
- Remove duplicates
- Review photo collections
- Rename files



Remove Empty Directories

The application searches and deletes empty directories recursively below a given start folder and shows the result in a well arranged tree

<https://sourceforge.net/projects/rem-empty-dir/?source=directory>

Remove Duplicate Files

- **Auslogics Duplicate File Finder**

<http://www.auslogics.com/en/software/duplicate-file-finder/>

- **Similar Images**

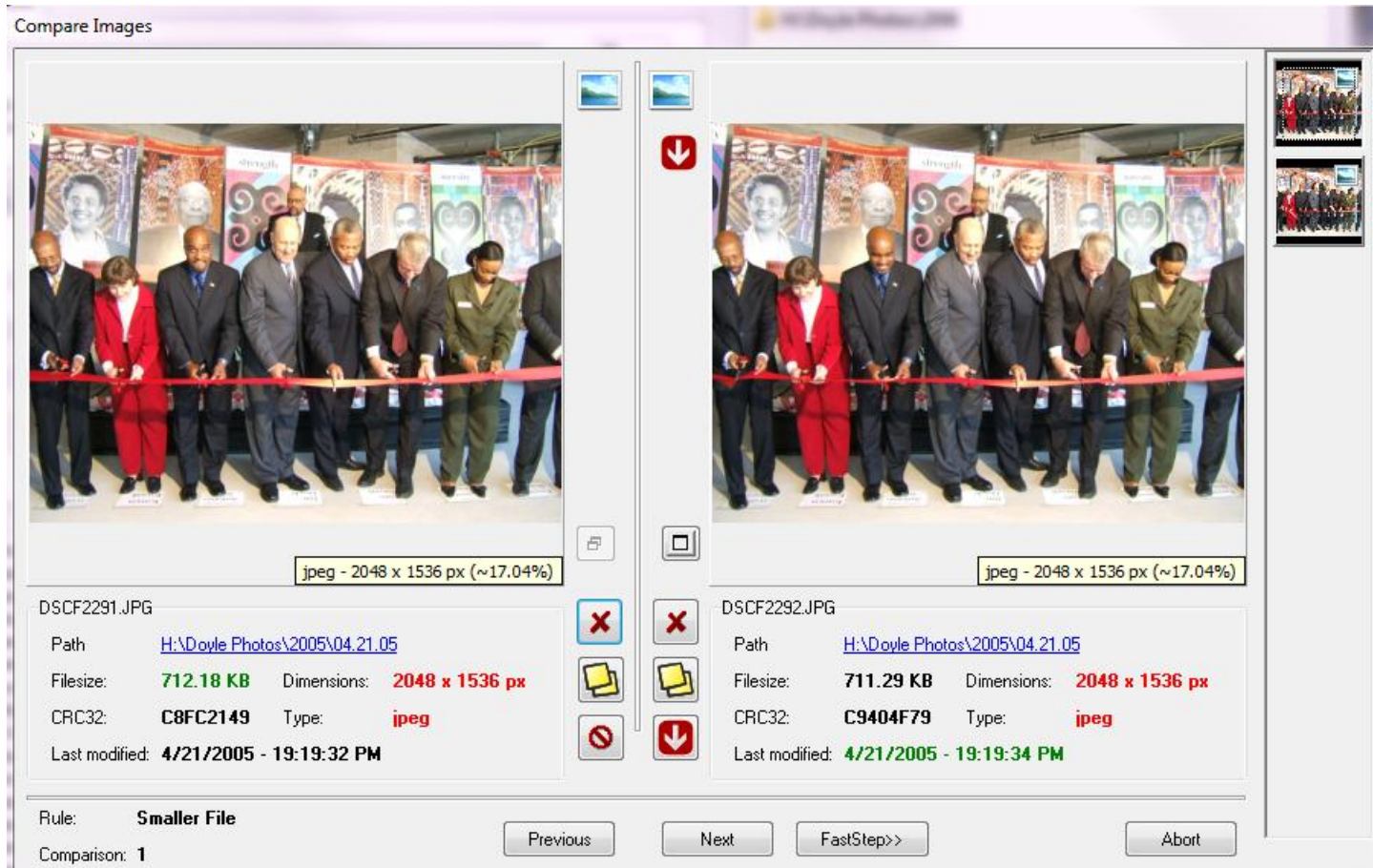
<http://similarimages.en.softonic.com/>

- **VisiPics**

http://www.visipics.info/index.php?title=Main_Page



Similar Images



Visipics

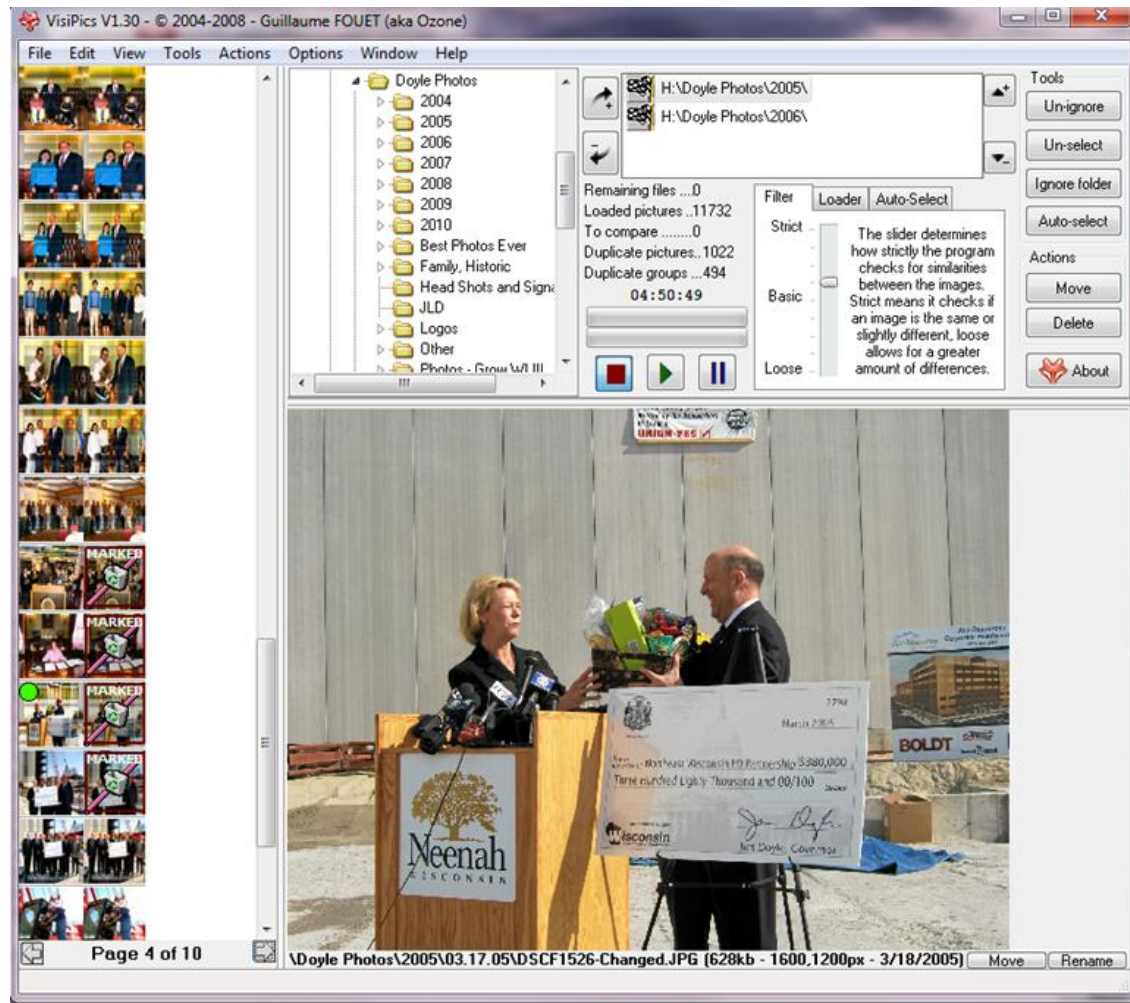


Image Viewer

IrfanView

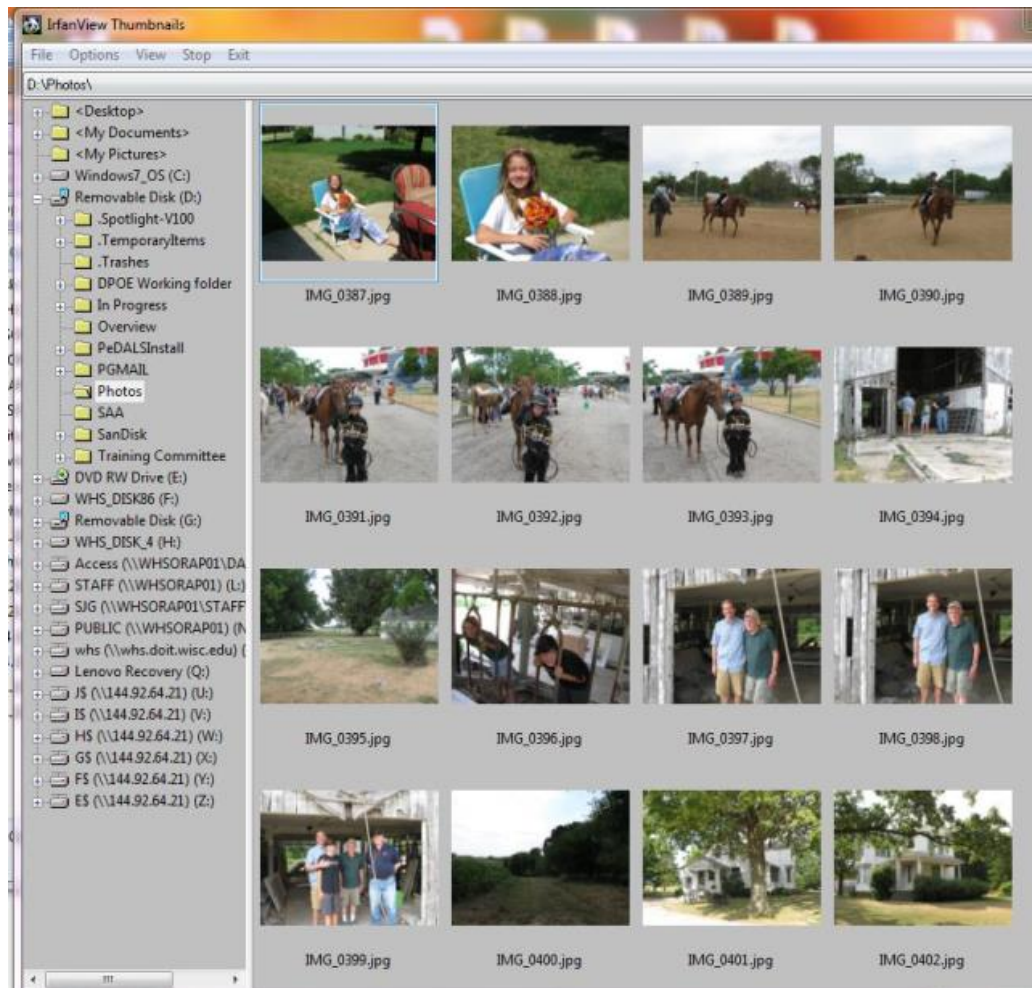
<http://www.irfanview.com/>

Tool with many different capabilities for image manipulation/editing

For photos, we can easily view an entire folder's worth of images at one time



Irfanview



Rename Your Files

Advanced Renamer

<https://www.advancedrenamer.com>

Advanced Renamer is a free program for renaming multiple files and folders at once.

You can construct new file names by adding, removing, replacing, changing case, or giving the file a brand new name based on known information about the file.

WHS Website



W I S C O N S I N
H I S T O R I C A L
S O C I E T Y

Resources for state and local government record keepers

<https://www.wisconsinhistory.org/Records/Article/CS15415>

Contact Us: govarc@wisconsinhistory.org

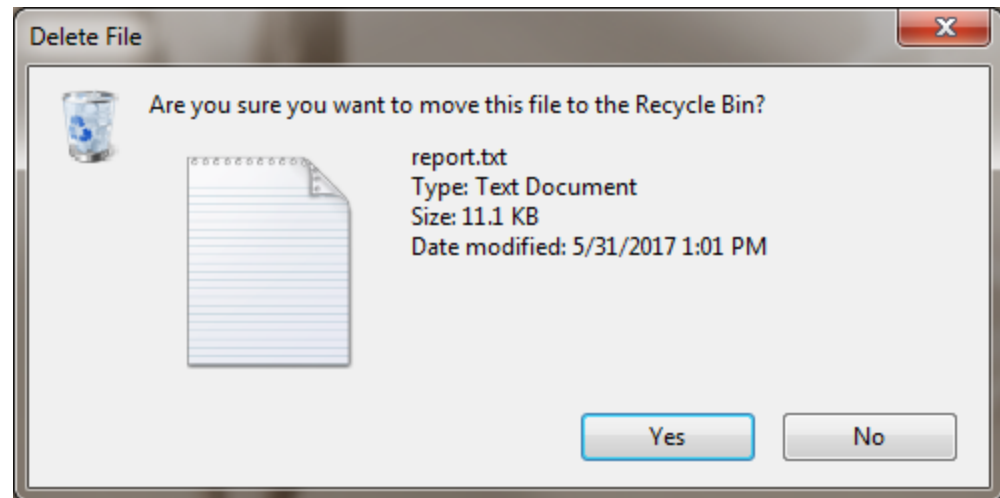
Fixity & Checksums



Image ID 95738

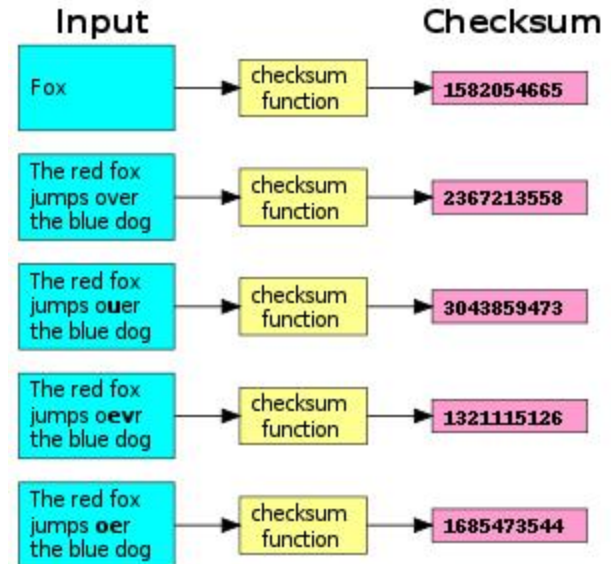
Fixity

- Digital files are at risk of:
 - Degradation/corruption (storage)
 - Accidental changes/deletion (humans)
- *Fixity* = Digital file has remained unchanged



Checksums

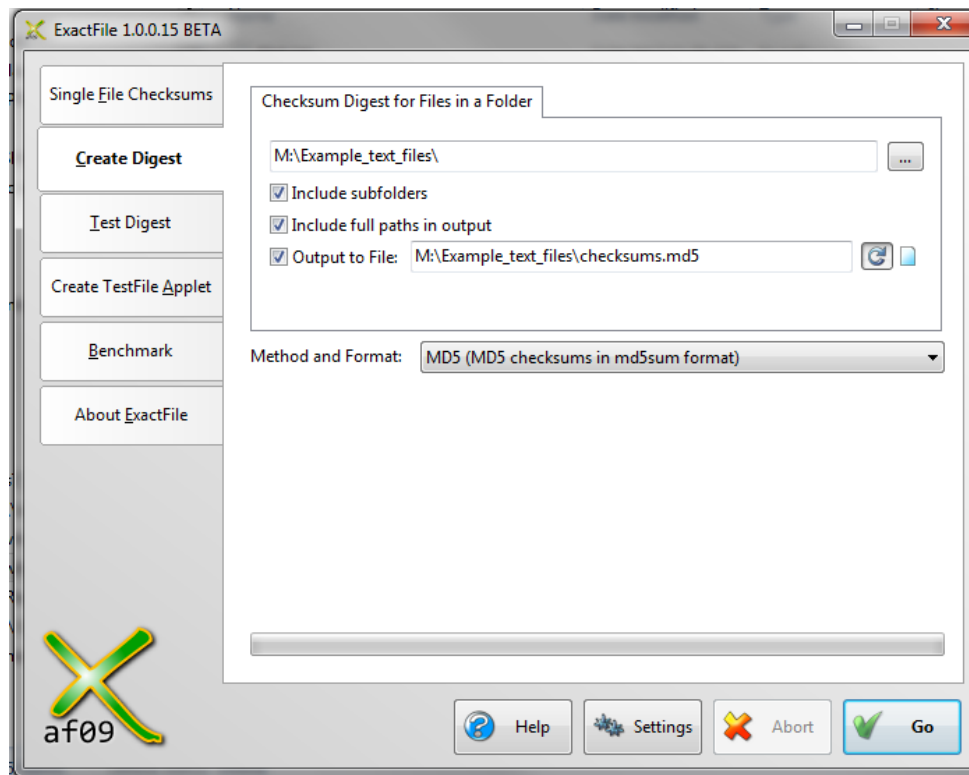
- *Checksums* are used to establish and monitor fixity
- A program runs a function against the contents of a file
- The resulting checksum is a short string of letters/numbers
- Each file produces a unique checksum
- An unchanged file will always produce the same checksum



Checksum = Fingerprint

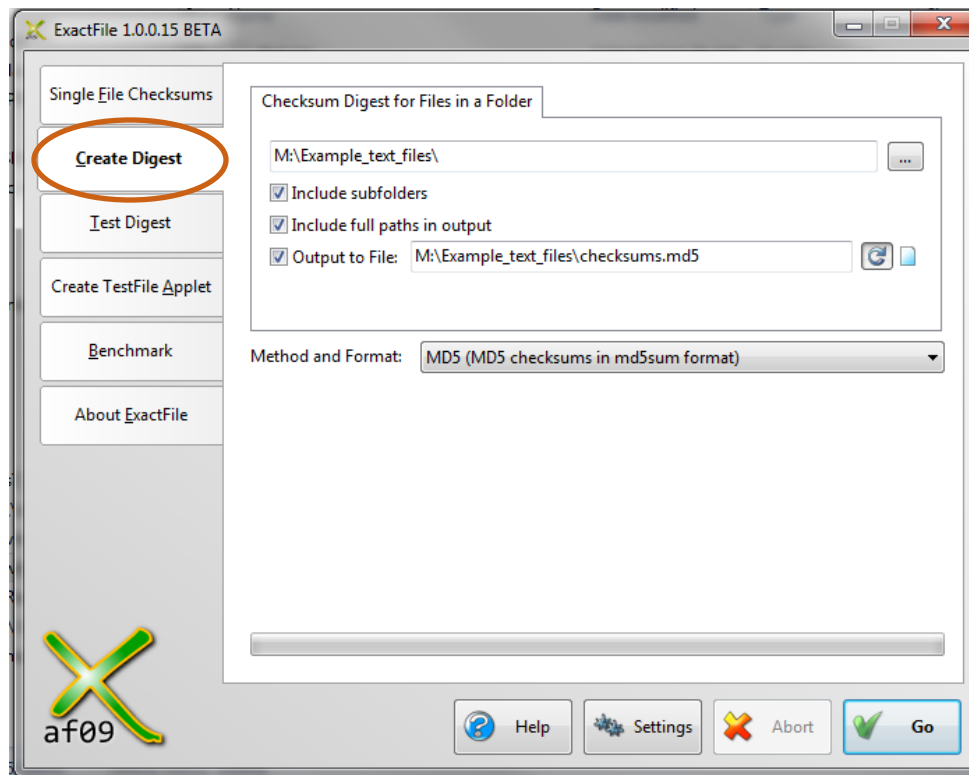
ExactFile

- Utility for generating checksums on Windows (one of many)
- Free, easy to download: <http://www.exactfile.com/downloads/>



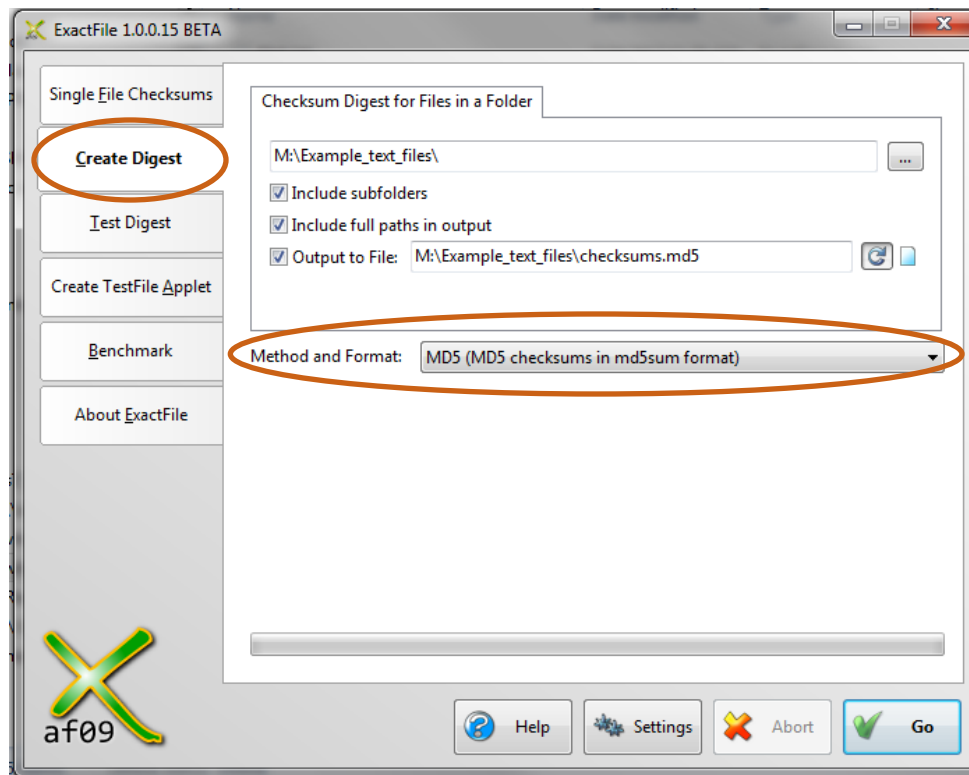
ExactFile

- Utility for generating checksums on Windows (one of many)
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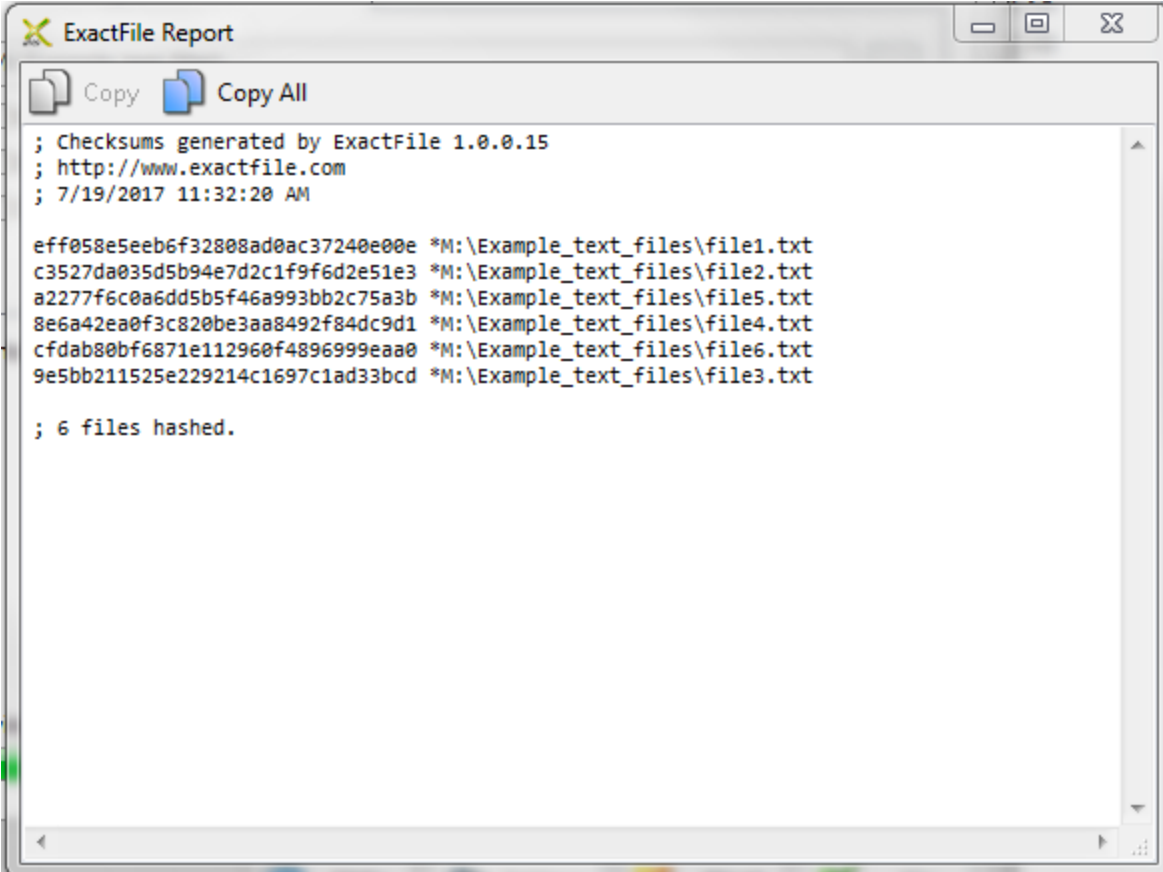


ExactFile

- Utility for generating checksums on Windows (one of many)
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ExactFile



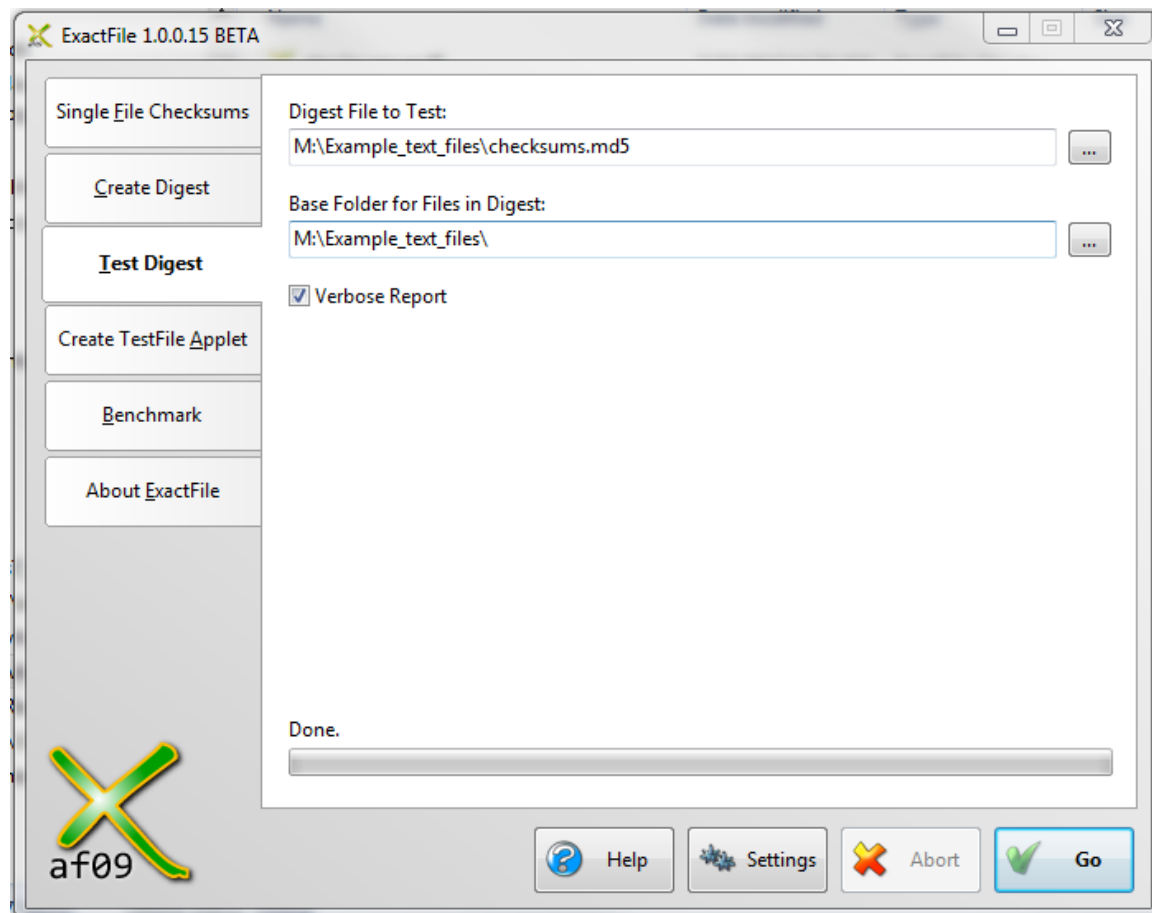
The image shows a screenshot of a software window titled "ExactFile Report". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. Below the title bar, there are two buttons: "Copy" and "Copy All". The main content area of the window displays a text report. The report starts with a header section containing three lines: "; Checksums generated by ExactFile 1.0.0.15", "; http://www.exactfile.com", and "; 7/19/2017 11:32:20 AM". This is followed by a list of six lines, each containing a long hexadecimal checksum followed by a file path in quotes. The paths are all located in the directory "M:\Example_text_files\" and are named "file1.txt" through "file6.txt". The checksums are: "eff058e5eeb6f32808ad0ac37240e00e" for file1.txt, "c3527da035d5b94e7d2c1f9f6d2e51e3" for file2.txt, "a2277f6c0a6dd5b5f46a993bb2c75a3b" for file5.txt, "8e6a42ea0f3c820be3aa8492f84dc9d1" for file4.txt, "cfdab80bf6871e112960f4896999eaa0" for file6.txt, and "9e5bb211525e229214c1697c1ad33bcd" for file3.txt. The list ends with a line "; 6 files hashed."

```
; Checksums generated by ExactFile 1.0.0.15
; http://www.exactfile.com
; 7/19/2017 11:32:20 AM

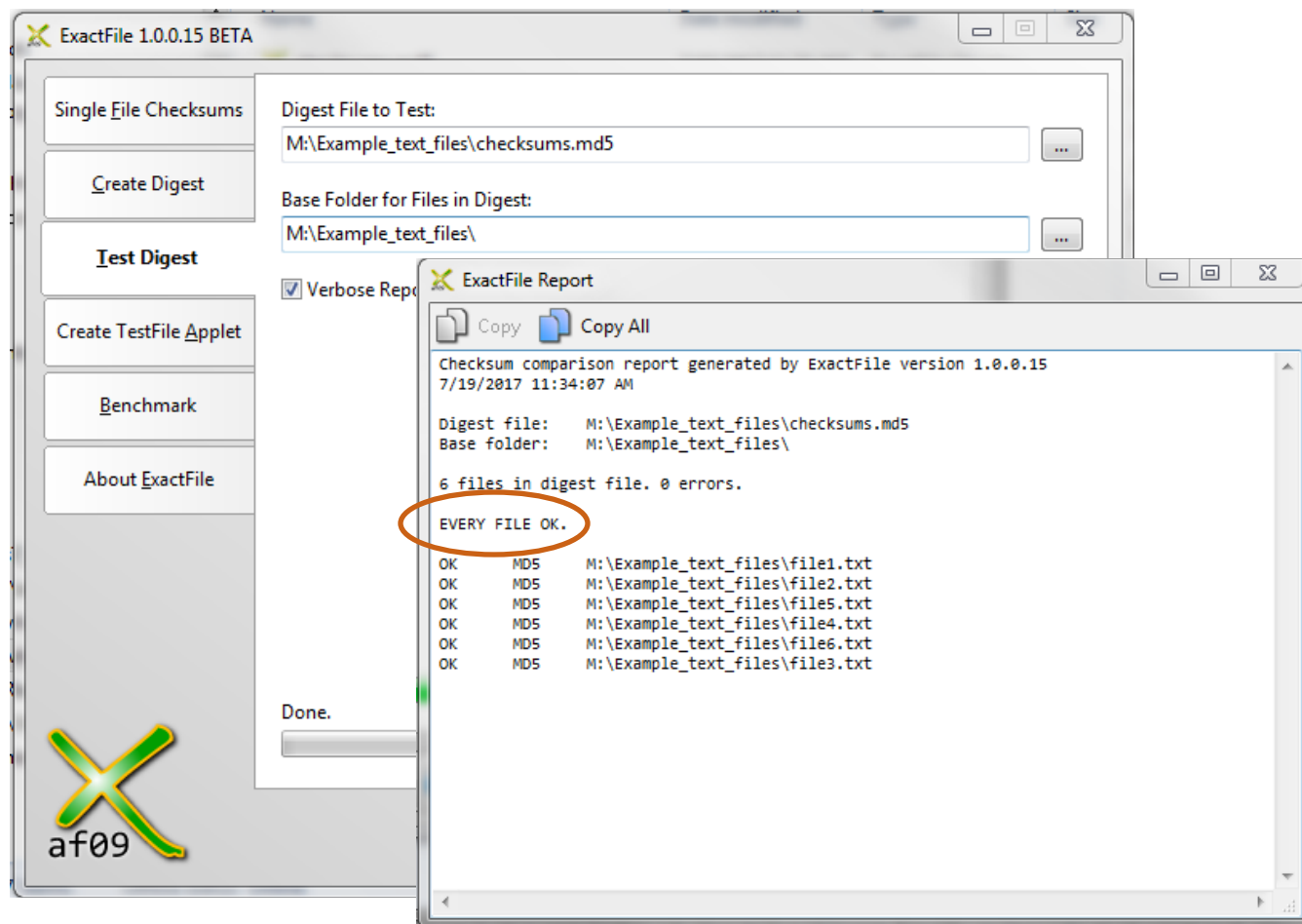
eff058e5eeb6f32808ad0ac37240e00e "M:\Example_text_files\file1.txt"
c3527da035d5b94e7d2c1f9f6d2e51e3 "M:\Example_text_files\file2.txt"
a2277f6c0a6dd5b5f46a993bb2c75a3b "M:\Example_text_files\file5.txt"
8e6a42ea0f3c820be3aa8492f84dc9d1 "M:\Example_text_files\file4.txt"
cfdab80bf6871e112960f4896999eaa0 "M:\Example_text_files\file6.txt"
9e5bb211525e229214c1697c1ad33bcd "M:\Example_text_files\file3.txt"

; 6 files hashed.
```

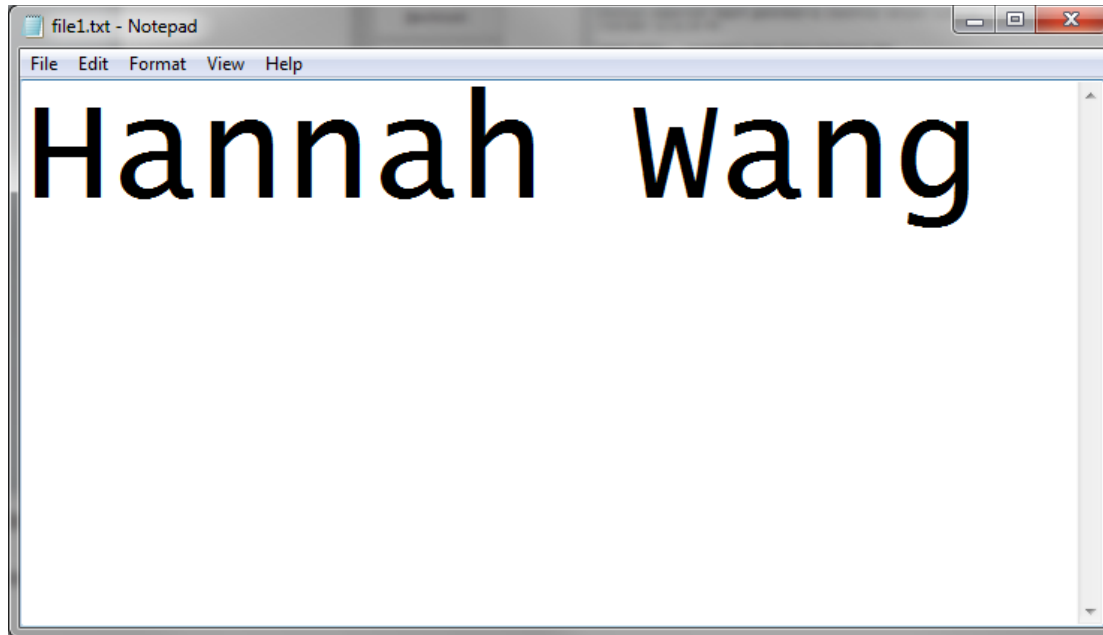
ExactFile



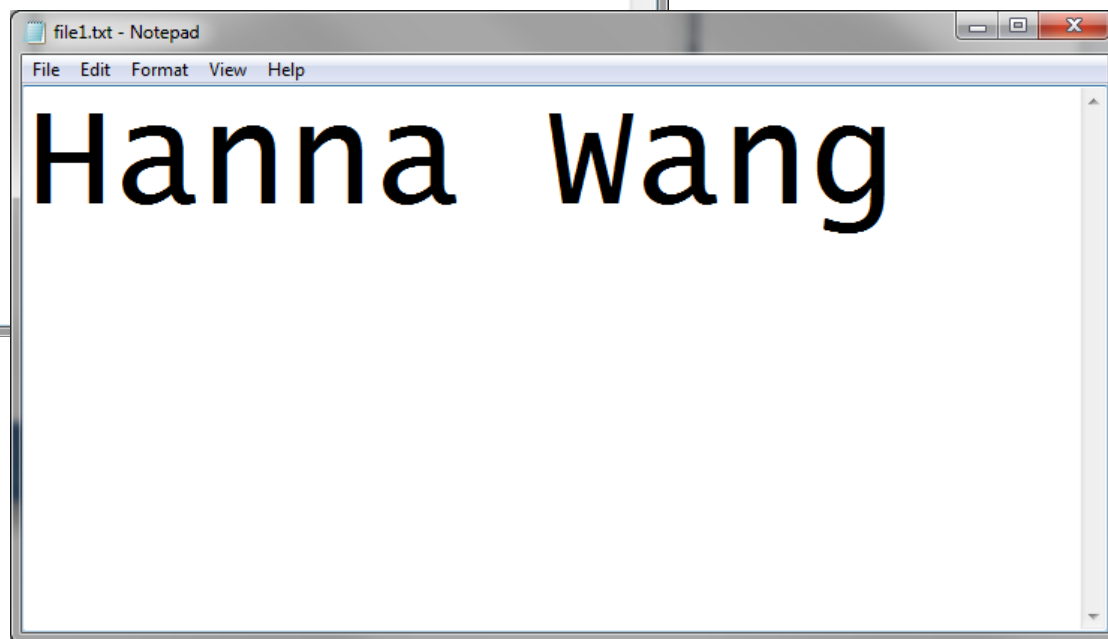
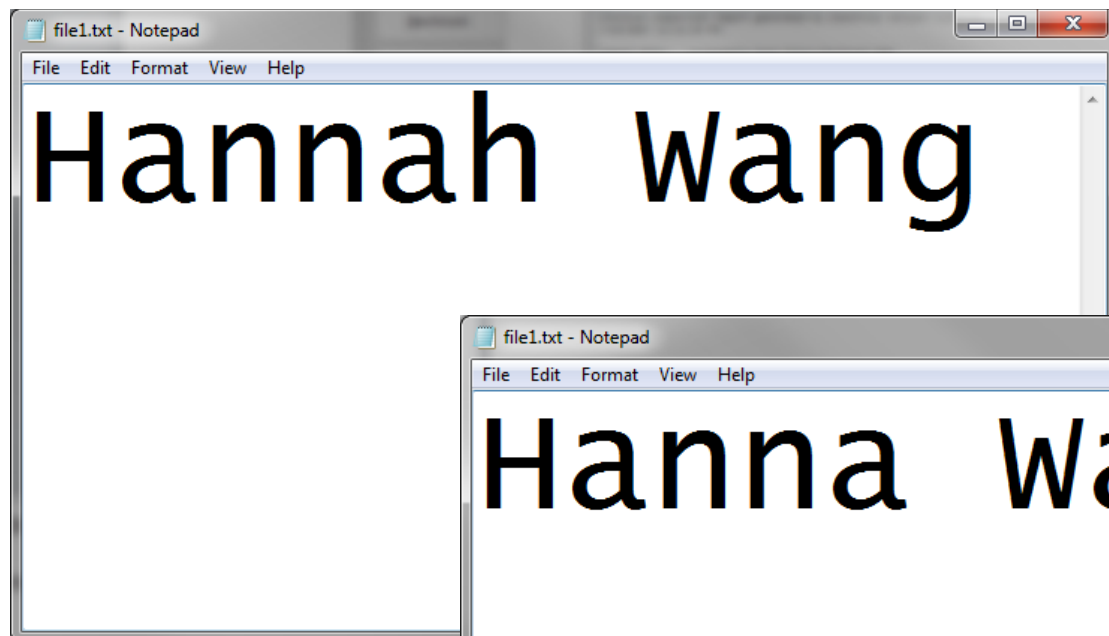
ExactFile



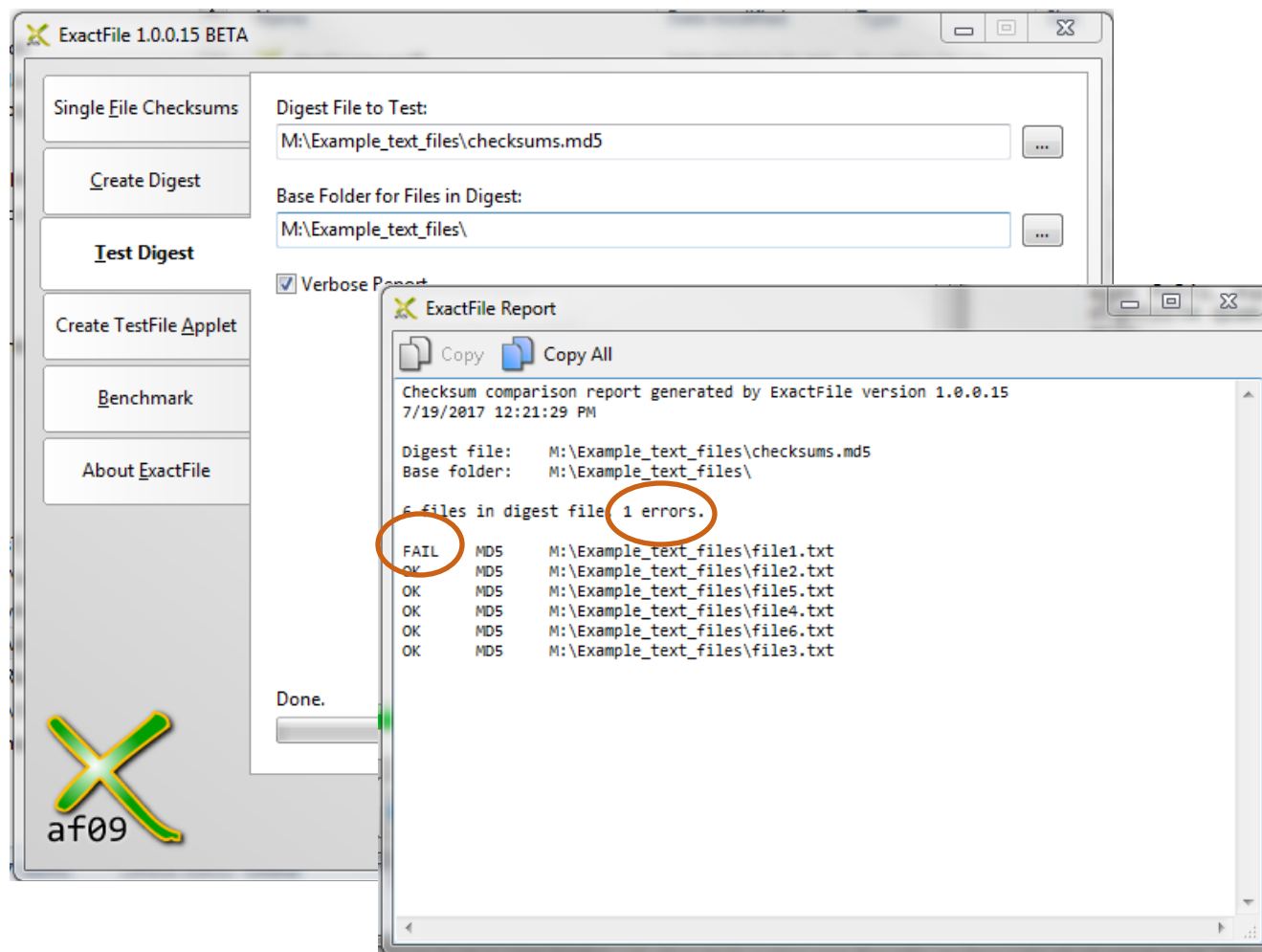
ExactFile



ExactFile



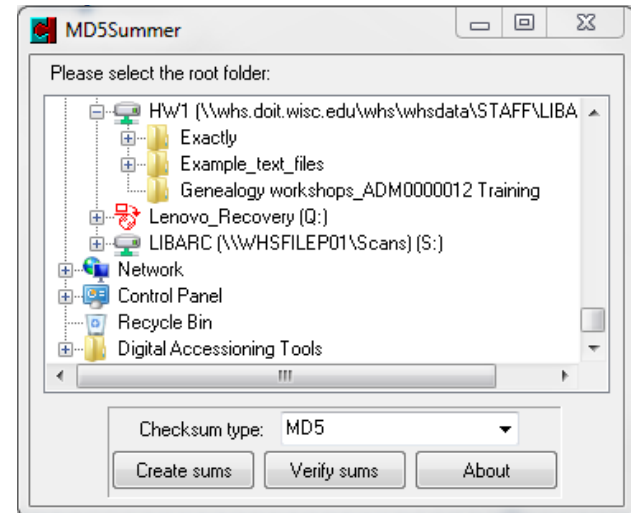
ExactFile



Other Fixity Checking Tools

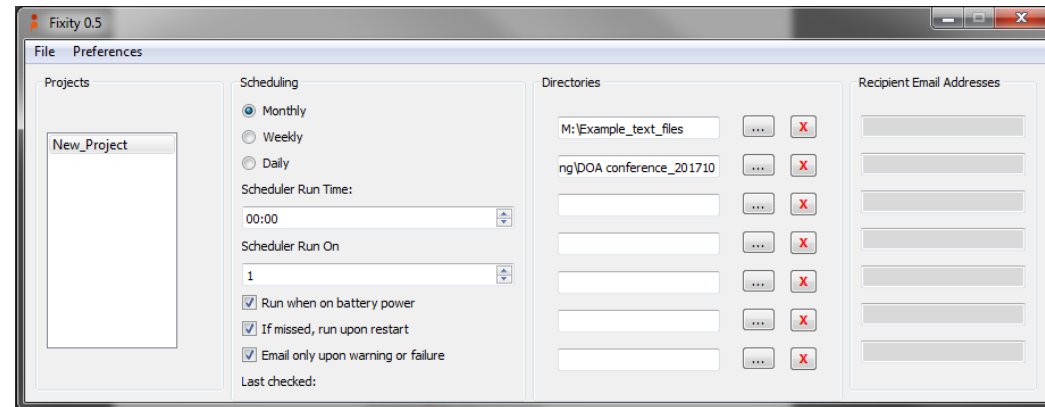
md5summer

- Similar to ExactFile
- Fewer options and settings
- <http://www.md5summer.org/download.html>



Fixity

- Schedule routine validations
- Generate and email fixity reports
- <https://www.avpreserve.com/tools/fixity/>



Inventories



Image ID 81752

Shared Drive Inventories

	A	E	F	G	H
1	Folder Name	General Summary of Contents	Assigned To	Proposed disposition	Final Disposition
2	AEB	Current Personal Files	Keep	Keep	Keep
3	AJB	Current Personal Files	Keep	Keep	Keep
4	AJN	Current Personal Files	Keep	Keep	Keep
5	AJS	Current Personal Files	Keep	Keep	Keep
6	Andrea	Project files for Lynda Barry and Emile Quiner	Michael E.	Keep and transfer	Deleted
7	AWK	Current Personal Files	Keep	Keep	Keep
8	AXD	Current Personal Files (but empty)	Mullen	Evaluate	Deleted
9	AXJ	Current Personal Files (but empty)	Keep	Keep	Keep
10	BB3	Ben Brewster M: drive - Lots of older/odd formats	Huelsbeck	Evaluate and delete	Deleted
11	CAB	Current Personal Files	Keep	Keep	Keep
12	CBJ	Current Personal Files	Keep	Keep	Keep
13	cd1	Collection of Manuscript abstracts, EADs, inventories, arrangements	Krause	Evaluate	Deleted
14	CIRC	Lots of folders, but not much content. Much is likely out of date	Hemming	Evaluate	Deleted
15	CM4	No real content	Knies	Evaluate	Deleted
16	CM8	Personal Drive	Krause/Knies		TBD
17	CMM	Several Accessions/Appraisals that were apparently printed out	Snyder		Deleted

Column Headers

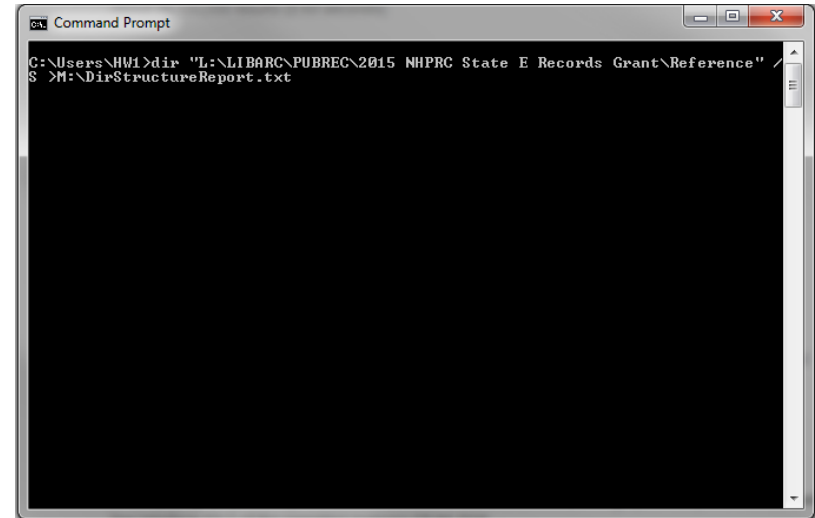
- Folder Name
- Date Range
- Files/Folders (#)
- Division
- Owner Listed
- General Summary of Contents
- Assigned To
- Keep/Delete/Transfer
- Schedule
- Event
- Disposition
- Completed Date



Image ID 8330

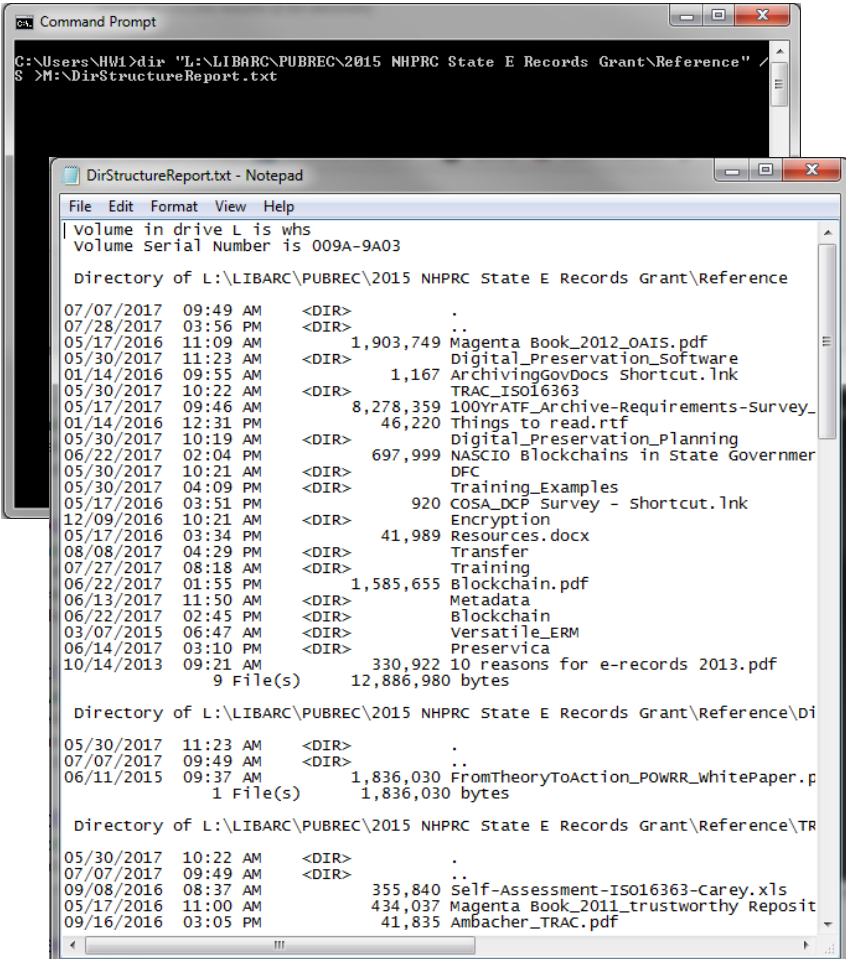
DIR Command

- DIR = directory (folder)
- Simple command prompt scripts to create reports of directory structures
- Output can be used to create inventory spreadsheets
- Good for:
 - Large, complex shared drives
 - Remote analysis



DIR Command

- DIR = directory (folder)
- Simple command prompt scripts to create reports of directory structures
- Output can be used to create inventory spreadsheets
- Good for:
 - Large, complex shared drives
 - Remote analysis



The screenshot shows a Windows Command Prompt window with the following command and output:

```
C:\Users\HW1>dir "L:\LIBARC\PUBREC\2015 NHPRC State E Records Grant\Reference" /S
>M:\DirStructureReport.txt
```

The output is displayed in a Notepad window titled "DirStructureReport.txt - Notepad". The output shows the directory structure of the specified path, including file names, sizes, and dates. The output is as follows:

```
Volume in drive L is whs
Volume Serial Number is 009A-9A03

Directory of L:\LIBARC\PUBREC\2015 NHPRC State E Records Grant\Reference

07/07/2017 09:49 AM <DIR> .
07/28/2017 03:56 PM <DIR> ..
05/17/2016 11:09 AM 1,903,749 Magenta Book_2012_OAIS.pdf
05/30/2017 11:23 AM <DIR> Digital_Preservation_Software
01/14/2016 09:55 AM 1,167 ArchivingGovDocs Shortcut.lnk
05/30/2017 10:22 AM <DIR> TRAC_ISO16363
05/17/2017 09:46 AM 8,278,359 100YrATF_Archive-Requirements-Survey_
01/14/2016 12:31 PM 46,220 Things to read.rtf
05/30/2017 10:19 AM <DIR> Digital_Preservation_Planning
06/22/2017 02:04 PM 697,999 NASCIO Blockchains in State Governmer
05/30/2017 10:21 AM <DIR> DFC
05/30/2017 04:09 PM <DIR> Training_Examples
05/17/2016 03:51 PM 920 COSA_DCP Survey - Shortcut.lnk
12/09/2016 10:21 AM <DIR> Encryption
05/17/2016 03:34 PM 41,989 Resources.docx
08/08/2017 04:29 PM <DIR> Transfer
07/27/2017 08:18 AM <DIR> Training
06/22/2017 01:55 PM 1,585,655 Blockchain.pdf
06/13/2017 11:50 AM <DIR> Metadata
06/22/2017 02:45 PM <DIR> Blockchain
03/07/2015 06:47 AM <DIR> Versatile_ERM
06/14/2017 03:10 PM <DIR> Preservica
10/14/2013 09:21 AM 330,922 10 reasons for e-records 2013.pdf
9 File(s) 12,886,980 bytes

Directory of L:\LIBARC\PUBREC\2015 NHPRC State E Records Grant\Reference\Di
05/30/2017 11:23 AM <DIR> .
07/07/2017 09:49 AM <DIR> ..
06/11/2015 09:37 AM 1,836,030 FromTheoryToAction_POWRR_WhitePaper.p
1 File(s) 1,836,030 bytes

Directory of L:\LIBARC\PUBREC\2015 NHPRC State E Records Grant\Reference\TR
05/30/2017 10:22 AM <DIR> .
07/07/2017 09:49 AM <DIR> ..
09/08/2016 08:37 AM 355,840 Self-Assessment-ISO16363-Carey.xls
05/17/2016 11:00 AM 434,037 Magenta Book_2011_trustworthy Reposit
09/16/2016 03:05 PM 41,835 Ambacher_TRAC.pdf
```


DIR Inventories

+	759				
		Directory	of S:\SO\S	O-Share\SO-Admin\D	WD Overview 2010 for New Admin_ADM00021_EVT_2 yrs
	760				
+	795				
		Directory	of S:\SO\S	O-Share\SO-Admin\F	orms-Templates-Logos-Misc
	796				
+	822				
	823	Directory	of S:\SO\S	O-Share\SO-Admin\F	orms-Templates-Logos-Misc\Table Tents
	824				
•	825	3/3/2016	10:36 AM	<DIR>	.
•	826	1/12/2017	4:00 PM	<DIR>	..
•	827	6/15/2010	3:58 PM		62,976 06-16-10 Hessen Delegation.doc
•	828	9/3/2009	1:30 PM		21,504 09-08-09 SESP Leadership Team Meeting.doc
•	829	10/27/2010	5:00 PM		20,992 10-28 10 Manitoba Green Jobs Workshop.Plus.doc
•	830	10/27/2010	4:08 PM		66,048 10-28-10 Manitoba Green Jobs Workshop.doc
•	831	10/6/2011	10:46 AM		77,824 10.10.11 Minhang Delegation Visit table tents.doc
•	832	8/26/2013	11:16 AM		27,136 DWD Logo TENT CARDS 2.doc
•	833	12/7/2011	5:57 PM		63,488 DWD Logo TENT CARDS.doc
•	834	5/19/2003	9:53 AM		19,456 Name Tents for Jan 30 mtg..doc
•	835	4/7/2011	10:45 AM		20,992 TEMPLATE - TABLE TENTS 2.doc
•	836	2/19/2004	5:51 PM		19,456 TEMPLATE - TABLE TENTS.doc
•	837	3/15/2004	1:15 PM		82,432 Tents - Health Care Committee.doc
•	838	11/18/2009	8:58 AM		57,856 Tents - WSSI Staff Team.doc
•	839		12 File	(s) 540,160	bytes
-	840				

DIR Inventories

33	Directory	of S:\SO\S	O-Share\SO-Admin\D	WD Overview 2010 for New Admin_ADM00021_EVT_2	30 files	2010-2011	Transition / info for new admins - do any of these describe C
34				Yrs			policy programs and need to be transferred to WHS?
35							
36	Directory	of S:\SO\S	O-Share\SO-Admin\F	orms-Templates-Logos-Misc	20 files	2003 - 2015	Admin type docs
37							
38	Directory	of S:\SO\S	O-Share\SO-Admin\F	orms-Templates-Logos-Misc\Table Tents	12 Files	2003-2011	Admin type docs
39							
40	Directory	of S:\SO\S	O-Share\SO-Admin\G	eorgia Maxwell	15 files	2011-2016	Vouchers, memos, letters, agreements
41							

823	Directory	of S:\SO\S	O-Share\SO-Admin\F	orms-Templates-Logos-Misc\Table Tents			
824							
825	3/3/2016	10:36 AM	<DIR>	.			
826	1/12/2017	4:00 PM	<DIR>	..			
827	6/15/2010	3:58 PM		62,976	06-16-10 Hessen Delegation.doc		
828	9/3/2009	1:30 PM		21,504	09-08-09 SESP Leadership Team Meeting.doc		
829	10/27/2010	5:00 PM		20,992	10-28 10 Manitoba Green Jobs Workshop.Plus.doc		
830	10/27/2010	4:08 PM		66,048	10-28-10 Manitoba Green Jobs Workshop.doc		
831	10/6/2011	10:46 AM		77,824	10.10.11 Minhang Delegation Visit table tents.doc		
832	8/26/2013	11:16 AM		27,136	DWD Logo TENT CARDS 2.doc		
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834	5/19/2003	9:53 AM		19,456	Name Tents for Jan 30 mtg..doc		
835	4/7/2011	10:45 AM		20,992	TEMPLATE - TABLE TENTS 2.doc		
836	2/19/2004	5:51 PM		19,456	TEMPLATE - TABLE TENTS.doc		
837	3/15/2004	1:15 PM		82,432	Tents - Health Care Committee.doc		
838	11/18/2009	8:58 AM		57,856	Tents - WSSI Staff Team.doc		
839		12 File	(s)	540,160	bytes		
840							

Benefits of Inventories

- Distribute responsibility of managing records
- Breaks work into manageable pieces
- Keep track of decisions and progress



Image ID 7019

Digitization Guidance

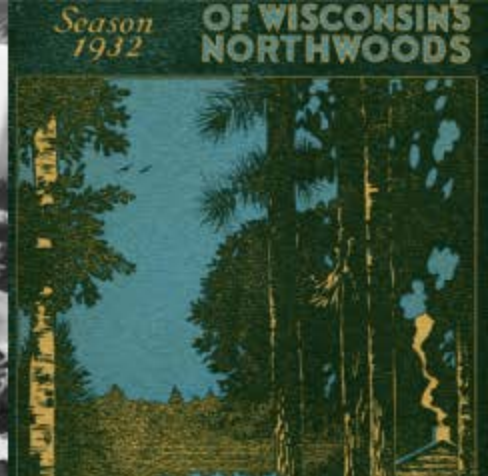
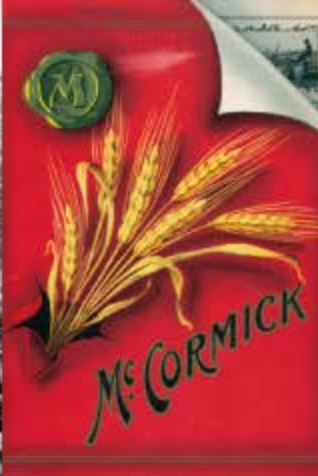


Digitization Guidance Document Overview

- Why create a document?
 - The time was right!
- Two versions – One for state agencies and one for local governments
 - Information identical except for procedure variances
- Accessible on WHS website:
 - <https://www.wisconsinhistory.org/Records/Article/CS15428>

Questions?





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THANK YOU

wisconsinhistory.org

