WISCONSIN HISTORICAL SOCIETY

Electronic Records Inventories

Contents

Introduction

In order to understand the electronic records held by your agency, it may be necessary to conduct some type of inventory or records assessment. This process can help identify what kinds of electronic records you have and the applicable General Records Schedule (GRS) or records Retention/Disposition Authorization (RDA). Records inventories can be used to determine what can be deleted, what should be retained by your agency, and what needs to be transferred to the State Archives. Inventories are also helpful if your agency is undertaking a drive cleanup process, in order to understand how your agency creates records and where they are stored.

If your agency implements an electronic records management system, you may be able to leverage the capabilities of that system to conduct a records assessment. The State Archives has an inventory template available for agencies.

Inventory template

This inventory template provides a basic framework for creating a records inventory. Its implementation can be adapted to meet your agency's needs.

Download inventory template (Microsoft Excel file, 12kb).

| A	B	C	D	E
Folder name	Files	Date range	Summary of contents	Evaluation
Folder name	Number of files in this folder	Year range of file dates	General summary of contents of this folder	Proposed action - keep (permanent), transfer, delete, etc
M:\Department Folder	2	2012-2018	folder for X department	Keep (permanent)
M:\Department Folder\Big Project	0	2012-2013	materials relating to big pro	Keep
M:\Department Folder\Big Project\Final Report	8	2013	final report for big project	Keep
M:\Department Folder\Big Project\Grant Application Materials	12	2012	grant application for big pro	Keep
M:\Department Folder\Big Project\Project Position	0	2012	materials relating to project	Keep
M:\Department Folder\Big Project\Project Position\CVs	3	2012	project position application	Delete
M:\Department Folder\Big Project\Project Position\PositionDescription	3	2012	PD for project position, incl	Keep
M:\Department Folder\Big Project\Budget	2	2012-2013	budget for big project, inclu	Keep
M:\Department Folder\Procedures	15	2012-2018	department policies and pro	Keep

Creating an inventory

There are several ways to populate an inventory with data (using either the template above or another custom framework). To create a list of the folders and/or files on a network drive, you can enter these manually, or you can use a number of automated tools. These are the methods that will be covered in this document:

- Manual data entry
- Command line
- Disk space analyzer applications

Manual data entry

A free, but labor-intensive, method for populating an inventory is manually entering data. This option is best for small drives or shared folders where only a top-level folder analysis is needed.

To determine the number of files or folders in a folder, right-click on a folder and select "Properties." If you have Read permissions for the folder, you will be able to see the number of files and folders contained, the total size of the folder, and the owner of the folder.
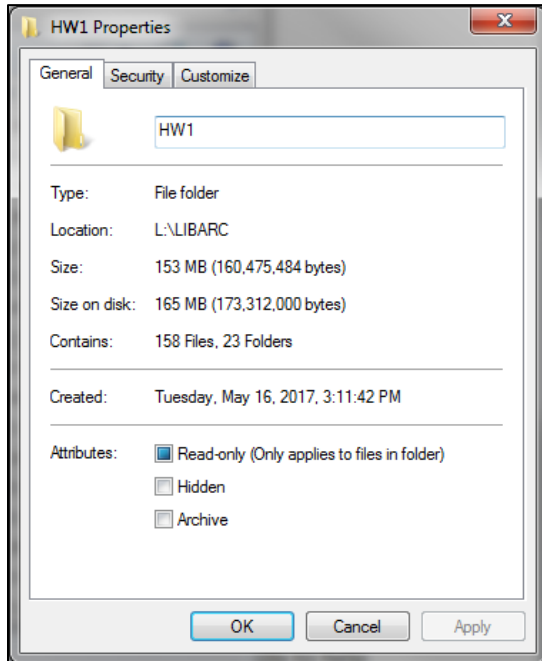
Opening each folder and doing a quick scan of filenames and modified dates should allow you to broadly characterize folder contents. In the records inventory, you can enter summaries such as "event photos," "personal files," "meeting minutes and agendas," etc. The purpose of this field in the inventory is to help you evaluate and assign a records schedule to the folder.

Command line

Windows has built-in tools to help you analyze your personal and shared network drives. By using Command Prompt, a command line interpreter that comes installed on Windows, you can create a report of a directory (or folder)* structure from any given root location.

Method 1: Create a script

A script created in a text editor can be saved as a .cmd file, which is a "batch file" that automatically runs in the Windows Command Prompt. This script is saved in the target directory (the directory that you want to create a report for), and it can be run simply by double clicking the file.

Creating a script in a text editor requires less work and technical skill than typing a command directly into the Command Prompt (see **Method 2: Use the Command Prompt**). However, this method offers a little less control and customization than using the Command Prompt.

These instructions will walk you through the process of creating scripts in a text editor for three different types of reports: top level folders only, folders and subfolders only, and all contents (folders, subfolders, and files).

Create a script in a text editor

Open a text editor, such as Notepad.

Copy and paste one of the following options into your text editor:
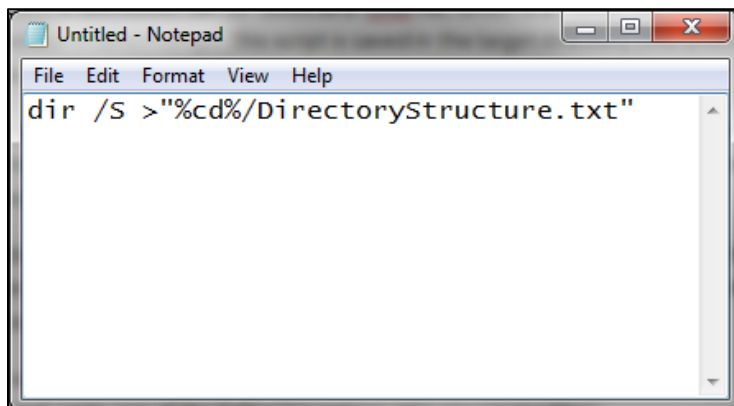
Top level folders only:

```
dir /A:D /O:N >"%cd%/DirectoryStructureTopFolders.txt"
```

Folders and subfolders only:

```
dir /A:D /O:N /S >"%cd%/DirectoryStructureNoFiles.txt"
```

All contents:

```
dir /S >"%cd%/DirectoryStructure.txt"
```


---

* In hierarchical file systems, the terms "directory" and "folder" can be used interchangeably to mean a container for files. "Subdirectory" is another term for "subfolder," meaning a folder nested inside another folder. A "root" directory is the topmost directory in a filesystem.

Save the file as a .cmd file (e.g. "DirectoryStructure.cmd"). Save it in the directory that you want to create a report for.
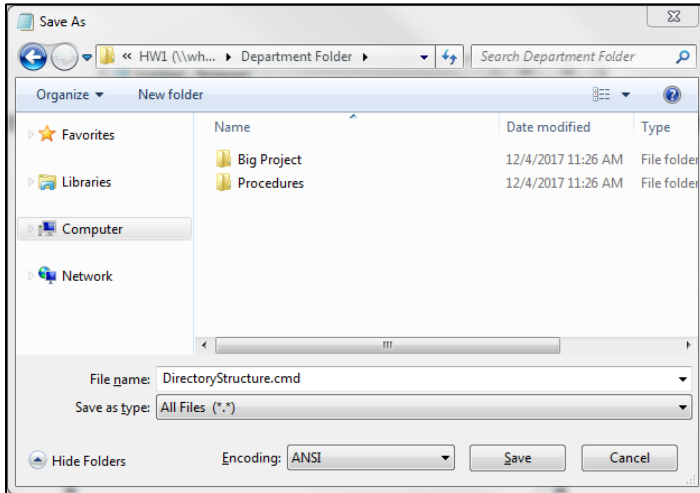
Generate a report

To create a report, double-click your saved .cmd file. Click "Run." This will automatically create a report at the root of your directory. This report can be opened in any text editor.
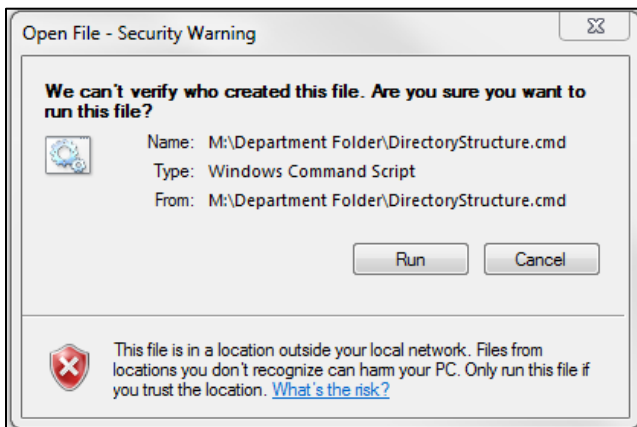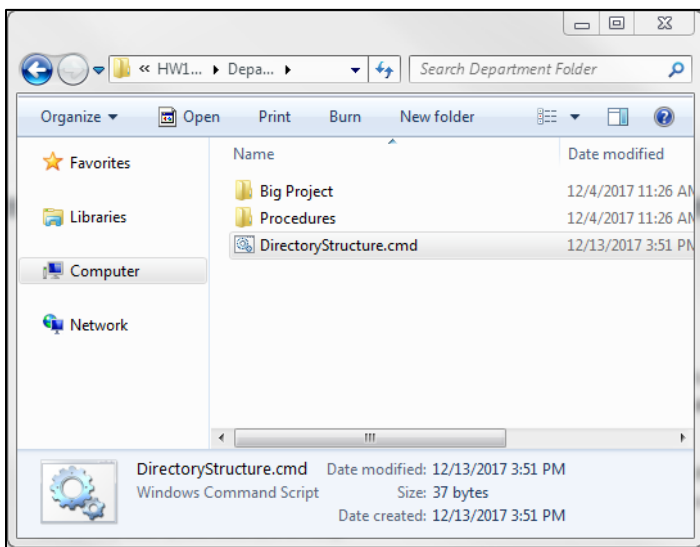
Method 2: Use the Command Prompt

Unlike creating scripts in a text editor, using the Windows Command Prompt does not create extra script files at the root of a directory. This method offers a little more flexibility and customization, but it requires some comfort using the Command Prompt.

These instructions will walk you through the process of using the Windows Command Prompt to produce three different types of reports: top level folders only, folders and subfolders only, and all contents (folders, subfolders, and files).

Open Command Prompt

Go to the Start menu and search for "Command Prompt" or "cmd.exe"
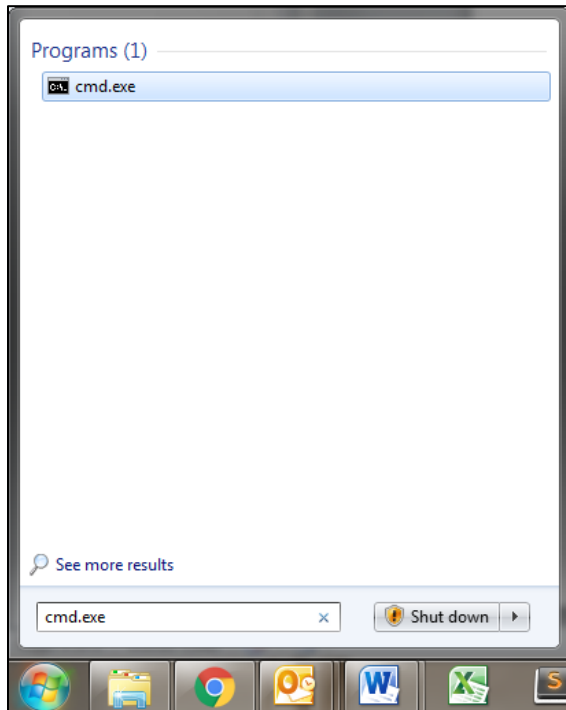
Enter a command

Copy and paste one of the following options into the Command Prompt:

Top level folders only:

```
dir "[insert directory to search here]" /A:D /O:N >"[insert report directory
here]\YourReportNameHere.txt"
```

Folders and subfolders only:

```
dir "[insert directory to search here]" /A:D /O:N /S >"[insert report directory
here]\YourReportNameHere.txt"
```
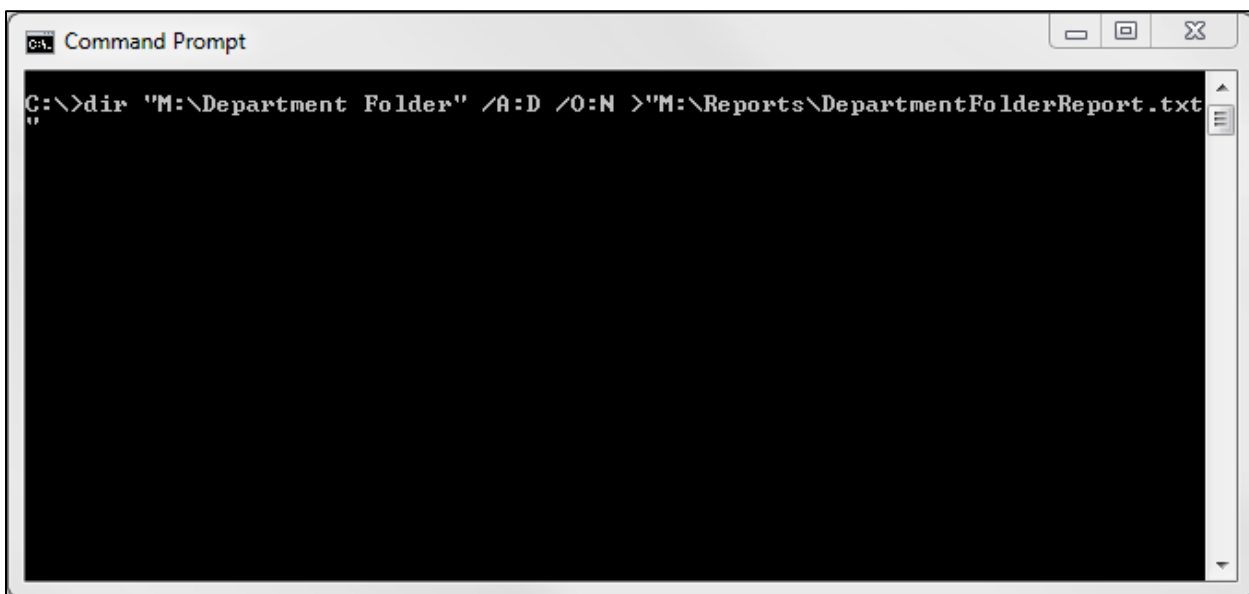
All contents:

```
dir "[insert directory to search here]" /S >"[insert report directory
here]\YourReportNameHere.txt"
```

For all of the options above:

In place of **[insert directory to search here]**, type the path of the directory you want to create a report for (see **How to Get a Directory Path**)

In place of **[insert report directory here]**, type the path of where you want to save the report (the directory must already exist in order to create a report in it)

In place of **YourReportNameHere.txt**, type the name of the report

For example, to create a report of the top level folder structure for **M:\Department Folder** and save the report titled **DepartmentFolderReport.txt** in **M:\Reports**, you would type the following command:
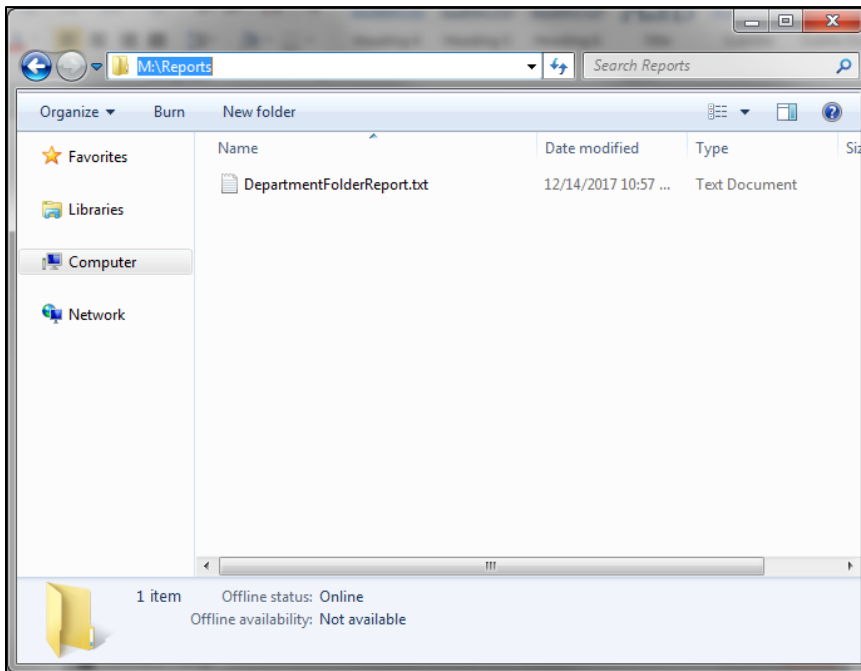
```
dir "M:\Department Folder" /A:D /O:N >"M:\Reports\DocumentsDirectoryStructure.txt"
```
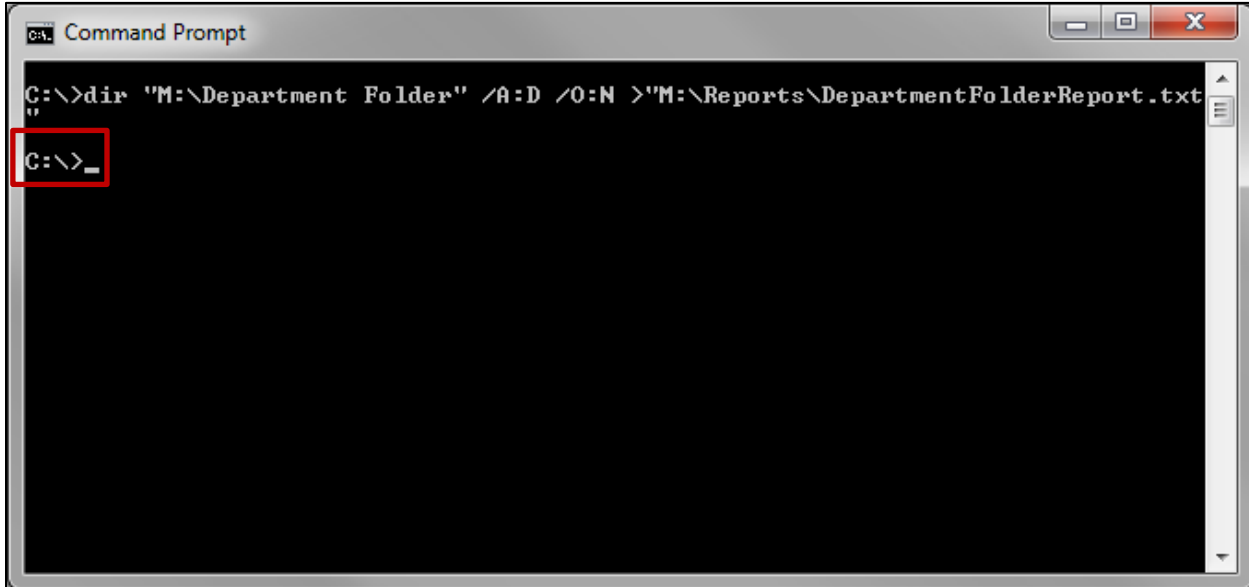
Generate a report

Hit "Enter." This will save a report with your chosen name in the specified location, which can be opened in any text editor.

The process is still running while the underscore line is flashing at the end of the command. The process is complete when a new prompt line appears (in the below example, the third line, starting with **C:/>**, is a new prompt).

Deciphering reports

Using any of the methods above will generate the same type of report, which lists directories and files. These reports contain a number of different elements:

1. The volume label and volume serial number of the current drive
2. List of directories (and subdirectories, depending on the command used)
3. Subdirectories, with their last modified date and time, identified by <DIR>
4. Files, with their last modified date and time and file size
5. Total number of files in this directory, and the combined size of those files

These reports can be used in conjunction with the inventory template provided above to assess the content of a particular drive and assist in cleanup projects.

How to get a directory path

A path describes the location of a file or directory in a file system. On Windows, a path generally looks like a string of words separated by backslashes. To get a path, navigate to the directory in Windows Explorer. Click the folder icon in the address bar.
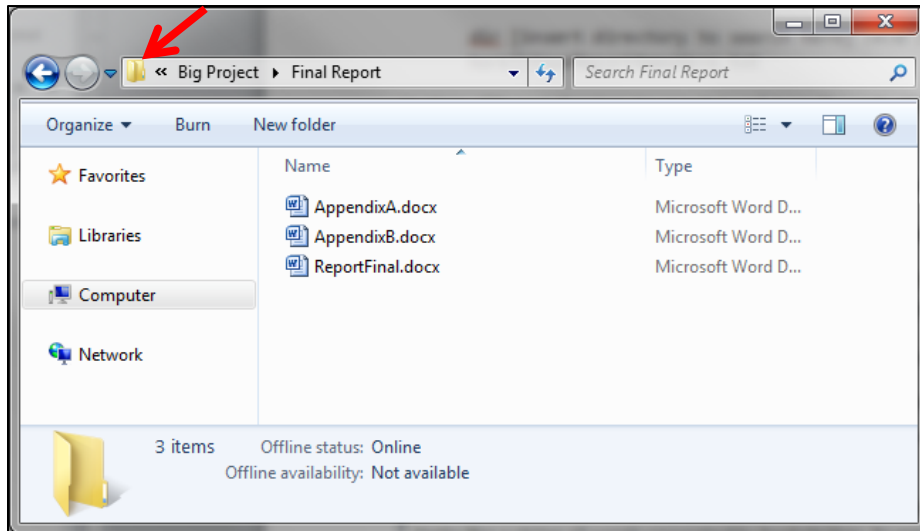
The address bar will now display the full path to the folder. You can copy and paste this as text into the Command Prompt, or any other application.
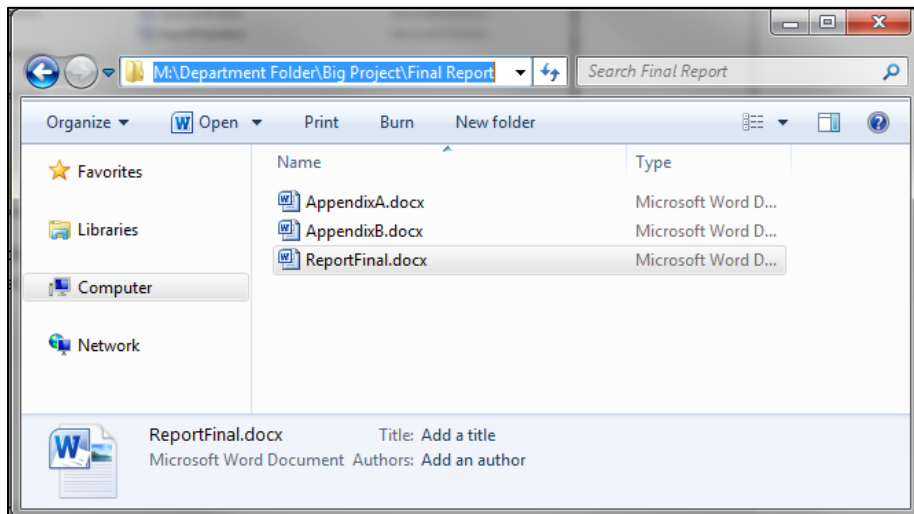
Disk space analyzer applications

There are many disk space analyzer applications that generate customizable reports and file inventories. Included below is a list of free and proprietary applications that have been tested by Wisconsin Historical Society staff as of January 2018.

SpaceSniffer

- Free disk space analyzer for Windows
- Website: http://www.uderzo.it/main_products/space_sniffer/

FolderSizes

- Proprietary disk space analyzer for Windows
- Website: http://www.foldersizes.com/

TreeSize Professional

- Proprietary disk space analyzer for Windows
- Website: https://www.jam-software.de/treesize/?language=EN