

THE COUNTRY LAWYER'S PAPERLESS OFFICE

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-Jim Calloway

Contents

Introduction	1
Why PDF & Why Acrobat	1
PDF File Types	2
Creating PDF Files	2
Law Office Information Systems	2
Basic Digital Document Management	4
The Digital Filing System — Folders	6
The Digital Filing System — File Naming	8
The Digital Filing System — Dual Folders	8
The Digital Filing System — An Example	8
Other Document Management Systems	9
Digital Document Storage Requirements	9
Conclusion	9

Introduction

Consider for a moment, what it would be like to be able to find documents at your desk without rummaging through file cabinets or boxes. Think of all the paper you put in files, because someday you may need it, only to never see it again. Consider the unpleasant process of closing those files and moving them to storage. Recall the times you've gone to storage to retrieve a single piece of paper. Now, consider keeping all those documents in electronic format, readily available if needed, and then closing files by dragging them from an active work directory to an archive directory.

Paper takes up space, it weighs a lot, becomes misplaced or even lost, and is just plain cumbersome to work with. Your client brings you three banker boxes of documents. You spend hours sifting and organizing the documents into folders, which are in turn organized in various redwells. You spend hours rummaging through the folders and redwells knowing that "one" document can be found in there — somewhere. On the day of trial you pull out the trusted dolly and load up your redwells and boxes and head to court. The redwells are splitting at the seams, they begin to fray and tear. Then opposing counsel makes mention of that "one" special document. Your fingers race through the pages, folders and redwells.

Why PDF & Why Acrobat

There are many reasons why you should consider Acrobat and PDF if you are thinking of moving from paper-based files to digital records. Acrobat provides good image acquisition capabilities, the ability to perform optical character recognition (OCR) on the images while retaining an exact image of the scanned pages, and easy sharing with other users. State courts that have adopted the LexisNexis File & Serve system for the electronic filing of documents have settled on PDF as the standard. If the courts are using PDF then it should be a good standard for use in the office. The Case Management/Electronic Case Files (CM/ECF) program relies on Acrobat.

In addition to using Adobe Acrobat for creating PDF files by acquiring images with a scanner or printing image-on-text PDF files from native applications, you can use Acrobat to make the PDF files truly useful. For example, you can add bookmarks and sticky notes to image-only files as well as image-on-text files. Pages can be copied, removed, rotated and cropped. If the files have a text background, you can highlight (pick your color, any color), underline, and strike-through the text. PDF files with background text (image-on-text) can be searched; image-only files cannot be searched but information contained in the Document Summary or in attached notes, will be included in indexes of document collections. PDF files can be "bookmarked." Bookmarking creates a table of contents linked to exact points within the document.

Common Paper/PDF File Tasks	
Paper File or Notebook	PDF File
Remove and discard page(s)	Delete page(s) — Ctrl+Shift+D
Remove, copy and replace page(s)	Extract page(s) 6.0 Alt+D-P>E 7.0 Alt+D>X
Number page(s)	Add Headers & Footers — Alt+D-H
Reorder pages	Drag & Drop page(s) on pages navigation tab
Bates number page(s)	StampPDF (third-party plug-in)
Highlight text	Commenting Tools (highlighter)
Annotate (add notes)	Commenting Tools (sticky notes and free text)

Common Paper	/PDF File Tasks	
Copy entire file	Save As (with new file name in Windows Explorer)	or Ctrl+C
Create table of contents	Bookmark — Ctrl+B	
Browse through file	Page Up/Page Down keys or Page/Previous Page buttons	Next
Go to specific page	Go To Page — Ctrl+Shift+N	

PDF File Types

Not all PDF files are created equally. There are image only PDFs and image on text files. Image only PDFs are just that; images only, just digital photocopies of paper documents. Image only files contain no text characters and as a result cannot be indexed or searched. Image on text files have an exact image of the hard-copy with text behind the image. Image on text files are created by printing to PDF or by running a PDF image only file through an optical character recognition (“OCR”) application. When using OCR applications, care must be taken to select a final file type that produces and exact image on text; otherwise, the visible text in the PDF image may be changed to comport with the interpretation of the OCR application.

Creating PDF Files

Generally speaking, PDF documents are created by printing a computer file to PDF or by scanning. Acrobat 6.0 has a File menu option for “Create PDF.” Acrobat 5.0 had no option on the File menu for creating new PDF documents.

To create a PDF document by scanning to PDF, from the File menu select Create PDF > From Scanner (Alt-F-F-N). At this point in the process check the settings for paper size, resolution and whether the documents will pass through a “feeder.” Once the document has finished scanning you have the option to add more pages to the scanner and pages to the PDF document being created or save what you have to file. When “Done” has been selected, the scanned image will appear in the document window. To save the document image, from the File menu select Save, or press Ctrl-S, and a dialog box will open allowing you to select an appropriate folder and assign a file name.

Printing to PDF can be as simple as clicking a button on a tool bar that invokes a PDF print driver; you are then prompted to select the folder where the PDF version of the document will be stored. When Acrobat has been installed on a computer, the installation routine adds a new virtual printer: Adobe PDF (Acrobat 5.0 installed two virtual printers to the system: Acrobat PDFW riter and Acrobat Distiller). With these “printers” any file on the computer that could be printed to a hardware printer can be printed to PDF. Certain image file types, such as .jpg, .tif and .bmp, can be printed to PDF by dragging and dropping the file icon (for example, from Windows Explorer) on to the empty Acrobat document window.

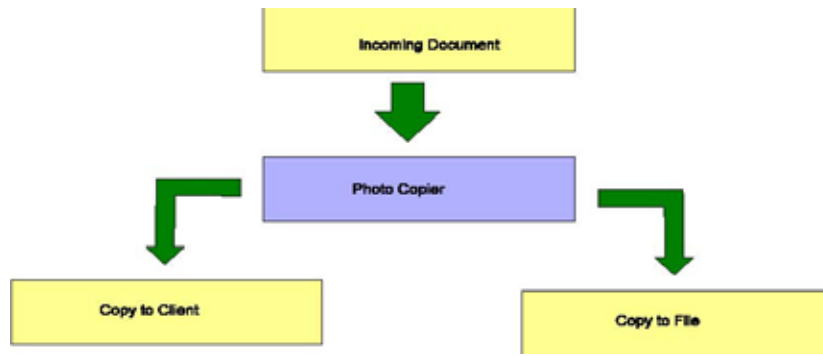
Law Office Information Systems

Lawyers and law firms process information. To appreciate how Acrobat can help your practice we need to first consider, at least conceptually, how law firms process information. We receive information from clients and other sources, we add information gained from research and experience, and we deliver information. The information that lawyers deliver takes many forms, it may be a pleading, an oral presentation to a court, an opinion letter, or an agreement, but in the end lawyers process and deliver information.

Most of the information that comes into the law office arrives in the form of documents. For that matter most of the information output from law offices, work product, goes out as some form of document. Taking a very simple and abstract view of the typical law office there are three primary systems involved in handling the documents that contain the information that we work with daily.

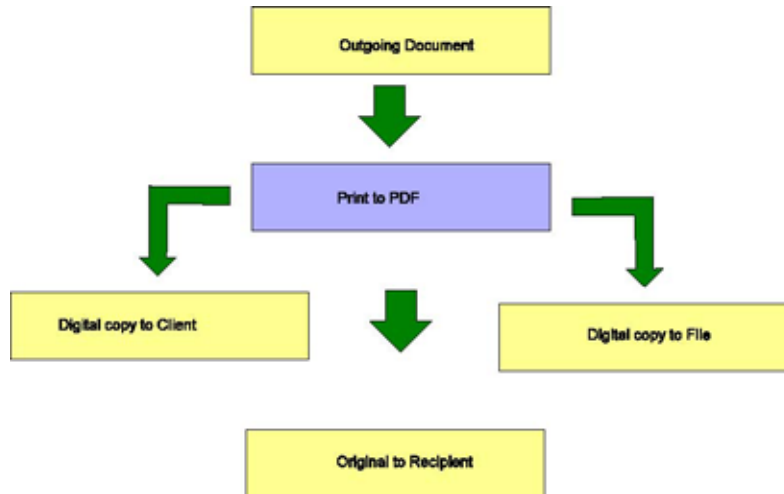
- A document generation system;
- A document copying or replication system; and
- A document retention or filing system.

The document generation system includes more than computers and printers, it includes fax machines, couriers and the daily mail. The latter generate as many documents as the internal systems; documents that contain information that lawyers need to analyze, store and retrieve. When documents come into the typical law office, the information system looks something like this:



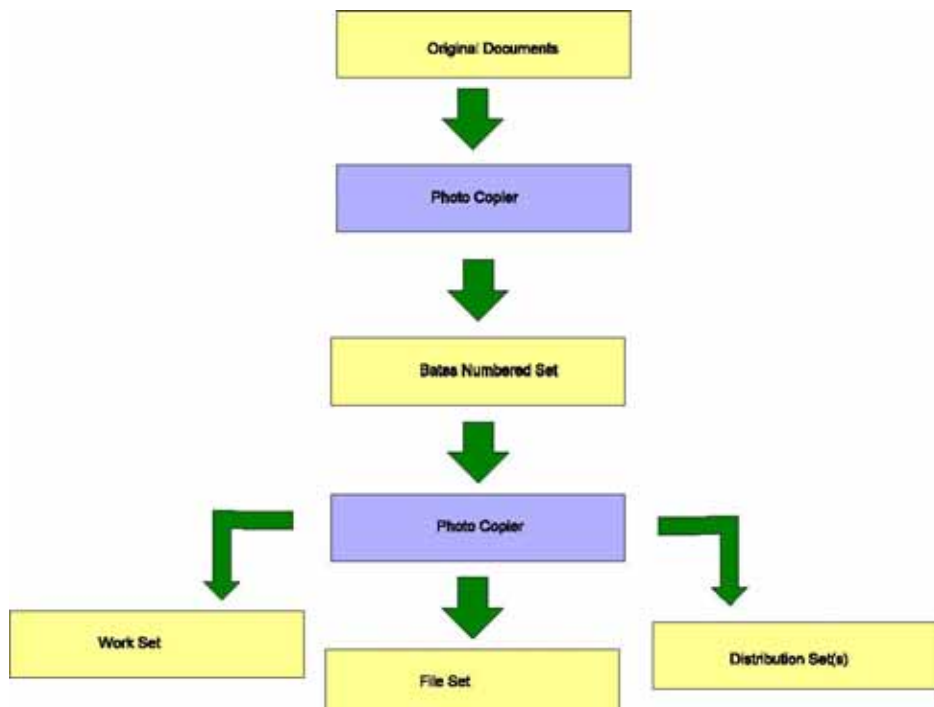
Incoming Document

When the law firm generates a document, for delivery to a third party, the information system can generally be depicted as shown on the next page.



Outgoing Document

In addition to the basic incoming and outgoing document scenarios, we should take a look at the special case of litigation documents. When a collection of documents comes in during litigation, whether from the client or an opposing party, they are typically preserved as a clean set, which is then photocopied and Bates numbered. The Bates numbered set is then copied to create a file set, a working set, and sets for distribution to other parties. That's a lot of paper, a lot of copies, a lot of toner, and a lot of time. When dealing with litigation documents, the typical law office information system copies, numbers and replicates the documents along the line of the diagram on the next page.

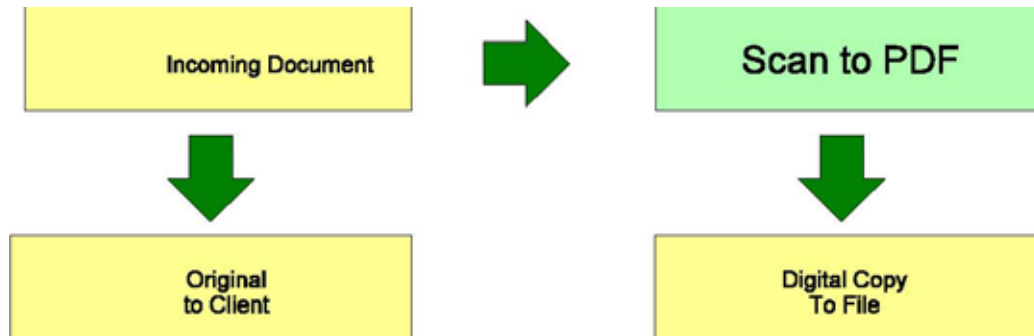


Litigation Documents

Basic Digital Document Management

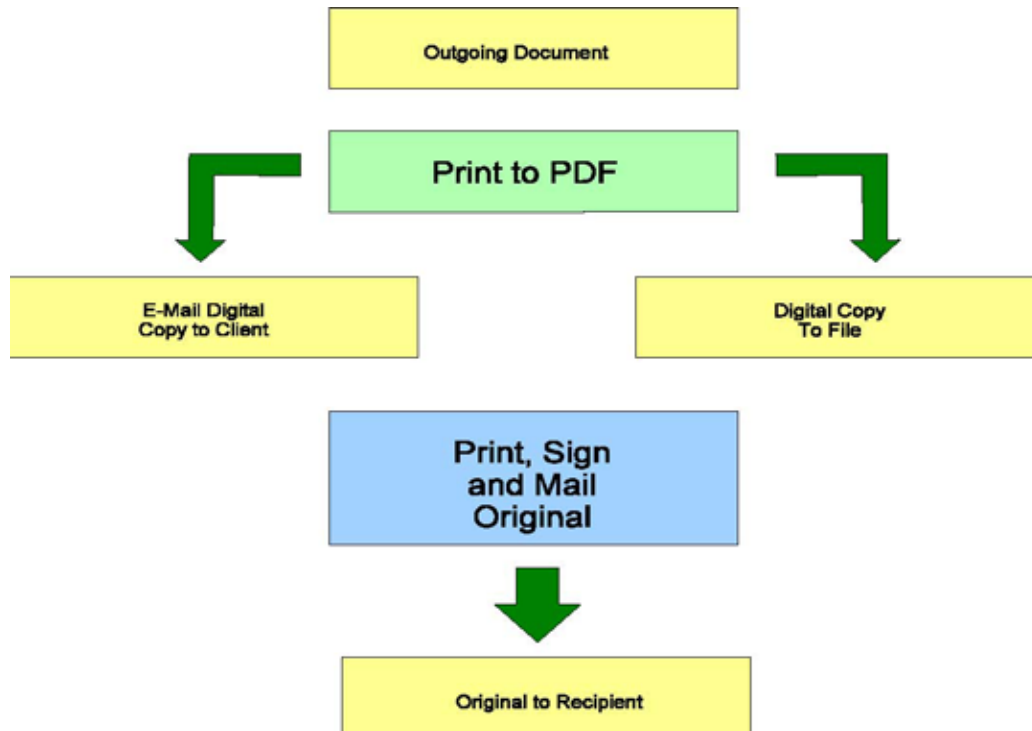
In the preceding illustrations, documents (whether incoming or outgoing), passed through the copying or replication system. In the typical office, a photocopier acts as the copying or replication system. In the paperless office, a scanner replaces the photocopier. Incoming documents pass through the scanner, rather than a photocopier, producing digital copies that are stored electronically. Outgoing documents, rather than being scanned or photocopied, are retained in their original digital format and printed (converted) to the same format as scanned documents.

When documents come into the paperless law office, the information processing system changes only slightly from the photocopier paper-based system. It looks something like this.



Incoming Document Scanned

At the other end of the process, when the law firm generates outgoing documents the information processing system looks like diagram on the next page.



Outgoing Document Print to PDF

To move to a paperless office using Acrobat you need follow only a few simple rules:

Rule Number One: When a piece of paper comes through the door it goes through the scanner.

Rule Number Two: All items of outgoing work product are printed (converted) to PDF.

Rule Number Three: Store digital images of all incoming paper and outgoing work product in logical folders.

Rule Number One: When a piece of paper comes through the door, it goes through the scanner. A simple rule with few exceptions. Use Acrobat to convert paper to PDF.

Rule Number Two: All items of outgoing work product are printed (converted) to PDF. Printing to PDF can be as simple as clicking a button on a tool bar that invokes the Adobe PDF print driver; you then select the folder where the PDF version of the document will be stored. "Printing to PDF" differs from printing to a physical printer in that no toner or paper is used; otherwise, the final product (file copy) looks just like what would come out of a physical printer. In some cases pleadings will be filed electronically with the court, copies are served on the other parties by the filing service (either electronically or by

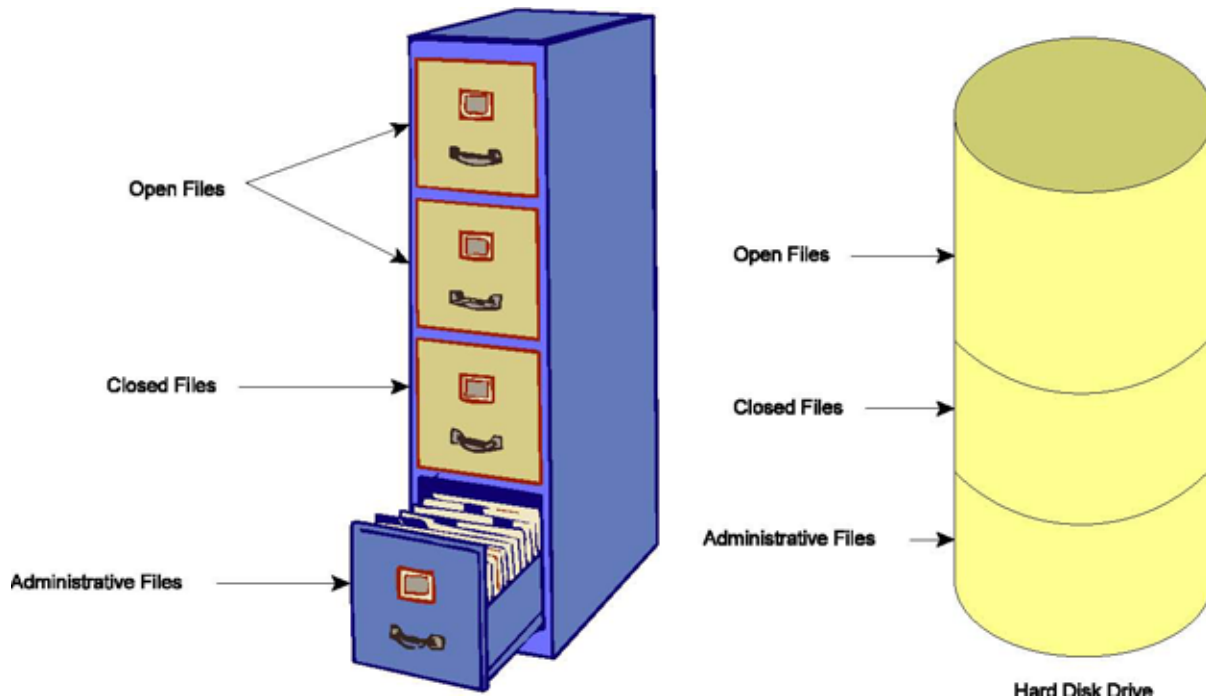
mail), and a copy of the pleading will be sent to the client as an attachment to an e-mail message. Looking at the process from our perspective the work product never exists in paper form.

Adherence to Rules Number One and Two will generate a lot of PDF files and the need for Rule Number Three: Store digital images of all incoming paper and outgoing work product in logical folders.

The Digital Filing System – Folders

What system do you use right now, today, to find a given piece of paper? Does it sound something like this: every client matter has a file, and somewhere you have an index of all those files (so if you want to find the Smith file and can't remember where in the filing system it resides, you go to the index, find the file identifier [i.e., a file number] and then locate the file). Now you knew the document you wanted was in the Smith file, great, but what if the Smith file contains 5,000, or 10,000, or more pages? At this point, the paper filing system starts to break down. How many sub-folders are you willing to create, and how do you keep track of them? Unless you have an absolutely huge number of files, or medium number of really huge files, then the paper file system can be replicated, refined and expanded in the digital world.

It may help to think of the digital filing system in terms of physical filing systems. The digital file room consists of electronic filing cabinets filled with folders that contain everything found in traditional paper files. Think of a shared hard disk drive as the file room, the cabinets within the room are large divisions on the disk, within those cabinet size divisions are folders for



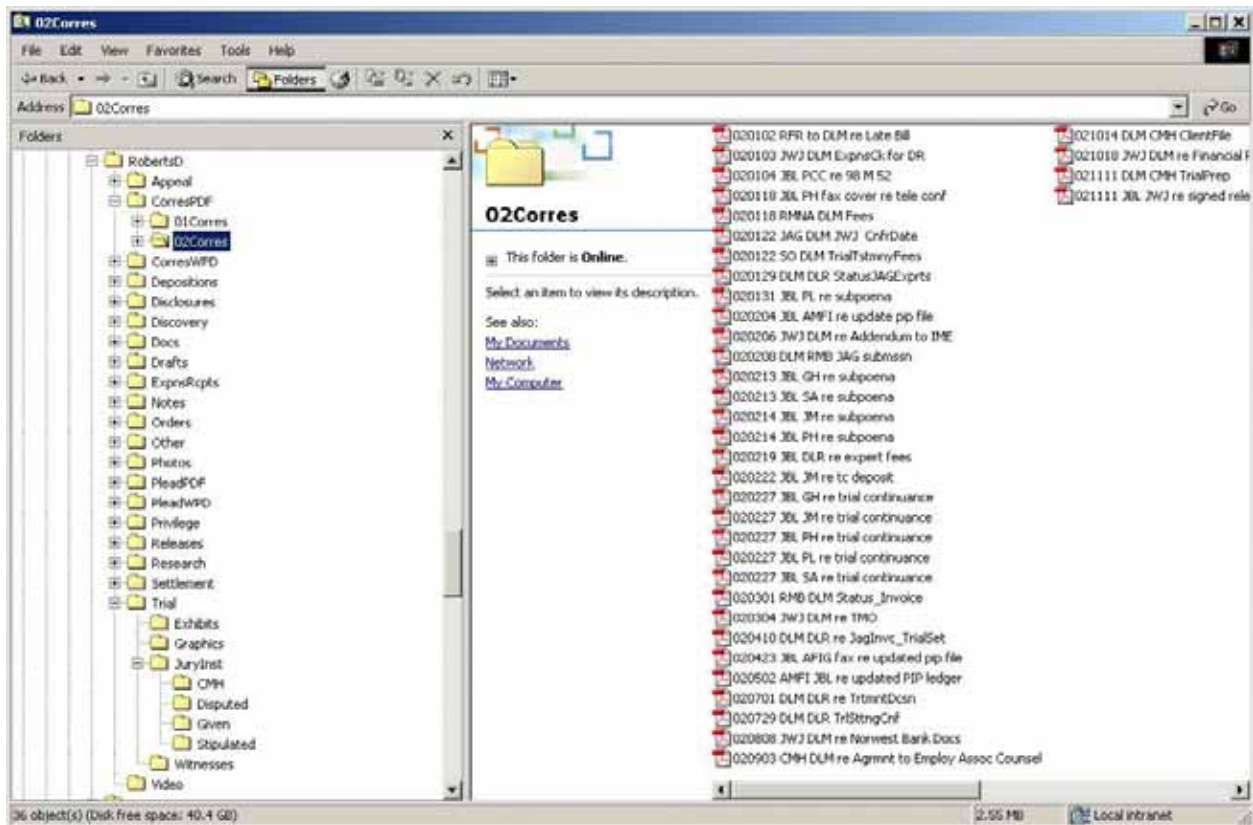
Paper and Digital Filing

As high tech as scanning and printing to PDF may sound, the storage and organizational system can adhere to an old fashion filing cabinet metaphor. The filing cabinet exists in virtual space (on a computer hard disk drive shared over a local area network). The filing cabinet has a name, "Work" (you may want separate digital filing cabinets for Closed Files, Administrative Files, etc.). Each computer on the network links to the filing cabinets by mapping one or more network drives, e.g., X:\Work. Now each desktop has access to the filing cabinet "Work." Within the filing cabinet are folders, one for each client, e.g. X:\Work\Smith. If a client has several matters then that client folder has a subfolder for each distinct matter, e.g., X:\Work\Smith\Corporation and X:\Work\Smith\Wills. Within each client matter folder are folders for various types of documents, such as correspondence, pleadings, expense receipts, research, privilege, etc.

A simple system for electronic filing can be implemented and standardized by creating a set of predefined subfolders for client matters. The next two graphics show a simple system for litigation file organization.



Predefined Litigation Folders



Client Litigation Folder Detail

The main folder bears the name “Litigation” meaning that this folder contains the file structure for new litigation matters. The folder above Litigation happens to be refined for a particular client, the folder below Litigation in the left pane, contains a set of empty “month” folders (e.g., 01 Jan, 02 Feb, 03 Mar — the numbers and leading zeros are used to make the list to sort properly). The subfolders in these new matter folders are empty; when opening a new litigation file simply highlight the Litigation folder, then select all (Control-A), copy, then paste this file structure onto the folder created for the new matter. Now, every litigation file has the same structure, at least to start with. As you can see, this file structure provides more detail than what you have been using in the paper world, and of course you can add all the sub-folders you want and then simply drag-and-drop the contents from one folder to another. File reorganization can’t be much easier. Create predefined folder sets for the types of matters that you commonly handle (e.g., Estate Planning, Estate Administration, Transactions, Etc.)

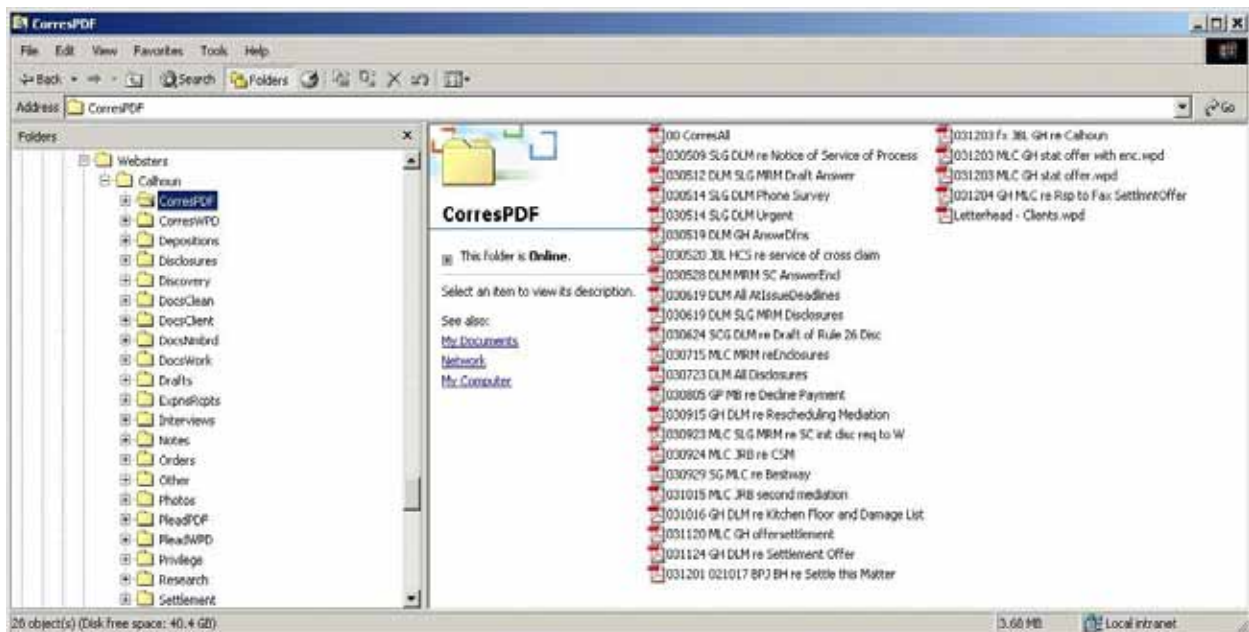
The Digital Filing System — File Naming

The files within the folders are named following another simple convention; the first part of the name always contains the date of the document in reverse year-month-day order, followed by a few descriptive terms, e.g. X:\Work\Smith\PleadPDF\020327 Com-plaint. By inserting the date at the beginning of the file name all documents in a given folder are sorted in year-month-day order. As simple as this may sound, using the document date as the first part of the file name is hugely important. The result can be seen in the right pane of the Dual Folders graphic below.

The Digital Filing System — Dual Folders

In order to maintain a digital file that looks like a paper file consider using dual folders for correspondence and pleadings. One folder contains the native application files (Word, WordPerfect, Excel, etc.), the other the PDF versions. For example, correspondence files created with WordPerfect are stored in a subfolder named “CorresWPD.” All correspondence files in PDF format are stored in a subfolder called “CorresPDF.” A similar dual folder system should be created and maintained for pleadings.

There are two reasons for maintaining dual folders. First, keeping the original work product in its native format allows for easy reuse. Second, the PDF folder acts like the old paper file, it contains all of the incoming and outgoing correspondence or pleadings, as the case may be.



Dual Folders - Correspondence PDF

The Digital Filing System — An Example

Implementation of Rule Number One (When a piece of paper comes through the door, it goes through the scanner) can be accomplished quite easily. The mail (correspondence, pleadings, bills, etc.) goes to an assistant who scans each piece, stores the image to the appropriate client or administrative folder and then distributes the paper to the proper recipient within the office (lawyer, paralegal, bookkeeper) for action. For example, when a letter arrives from opposing counsel, it goes through the scanner and then goes to the proper recipient within the office. A letter is written to the client that discusses the enclosure that typically begins “Enclosed for your review and records please find an item of correspondence that we received from opposing counsel. We have retained a digital copy in our records.” Following this procedure, paper comes in - goes through the scanner - then goes out to the client. In some cases, with the right client, simply send an e-mail message and attach a digital copy; the original letter then goes to the recycle bin or shredder.

Other Document Management Systems

If the logical file structure document management system described above does not sound robust enough for your office, consider an industrial strength solution. However, if all you want is system that indexes all of your files so that you can run a computer search to find the Smith lease, or that motion to compel a psychiatric examination, you already have it -it’s called Windows Explorer. You can use Windows Explorer to find files containing specific words (Acrobat document summaries and notes are included in the information searched by Explorer). If you need more than Windows Explorer can deliver, then consider Worldox or iManage. They provide industrial strength file management (at a price of course, not just in dollars but in training and following a regimented system of coding files). In the middle, between Windows Explorer and Industrial Strength, are case management programs (or groupware) like Amicus Attorney, Time Matters and GroupWise. These programs have document management capabilities, some more than others. Try implementing a good logical in-house electronic file system like that described above; if you can’t find your documents with that system (aided by Windows Explorer when the going gets rough), then look at Document Management System (DMS) applications like Worldox (www.worlddox.com) and iManage (www.iManage.com)

Digital Document Storage Requirements

A single drawer in a filing cabinet will hold approximately 10,000 pages. To store the same 10,000 pages electronically requires 500MB (megabytes) of storage space. A single compact disc (CD-ROM, CD-R, or CD-RIGHT-OF-WAY), will hold 700MB or the equivalent of 1.4 file cabinet drawers. An entire four-drawer filing cabinet (40,000 pages) then requires only 2GB (gigabytes). Although there are standards issues yet to be resolved, prices for DVD writers have approached the reasonable range with many under \$300.00. A single DVD will hold 4.3GB or the equivalent of two four-drawer filing cabinets. 80GB hard disk drives currently sell for less than \$100.00; that’s the capacity of 40 four-drawer filing cabinets. If you think in terms of boxes, instead of filing cabinets, one box (15½” x 12” x 10”) holds approximately 2,500 pages. Those same 2,500 pages require only 125MB of digital storage space. Five boxes of documents will fit on a single CD-ROM with room to spare. Even if the space required for a single page, scanned at 300dpi, was doubled to 100KB, 10,000 pages (one full file cabinet drawer or four boxes) would only require 1GB of electronic storage capacity.

As a general rule, when scanned at 300dpi (dots per inch, a measure of resolution), a single scanned page (8½ by 11 inches) requires storage space of approximately 50KB (kilobytes). This is an average and assumes the image was acquired and stored as “black and white” or “line drawing,” not color or gray scale. The discussion of storage space requirements to this point has addressed only scanned documents. Documents printed to PDF require much less storage space. For example, a six page word processing document 30KB in size, grew to 70KB when printed to PDF but would have been 300KB if scanned.

The available space for digital document storage continues to grow while prices continue to drop. Contrast that

with the fixed physical space for storing paper files and the continual increasing costs of such storage. Document collections should be stored on a network drive, whether an internal hard disk drive or a storage appliance such as a Snap Drive®. When planning or acquiring storage devices, consider the speed at which documents can be retrieved. Fast hard disk drives (7200 RPM or 10,000 RPM) are much preferred. If stored documents will be available across a network, fast Ethernet (100MB/Second) provides good performance. Standard Ethernet (10MB/Second) and 801.11(b) wireless (11MB/Second) do not provide sufficient bandwidth if you create large scanned documents (documents in excess of 1,000 pages)

Conclusion

Following a few simple rules, any office can switch from paper to electronic filing. 1) Scan all incoming documents to PDF; 2) Print all outgoing work product to PDF; 3) Create a virtual filing cabinet with folders for each client matter; 4) Segregate document types within the client matter folders into appropriate subfolders; and 5) Use the document date (yymmdd) as the first part of the file name to produce chronological ordering. Use Acrobat to work with digital documents in much the same way that you work with paper documents. Use Acrobat to create bookmarks and links, the hallmarks of electronic briefs. Finally, know that when your documents are stored electronically they can be copied, backed-up, replicated and stored in multiple locations.