CM/ECF: It's That Easy

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This article is about Case Management / Electronic Case Files (CM/ECF),[1] an electronic docketing system being deployed throughout the federal judiciary that allows attorneys to file documents and access complete case files over the Internet from anywhere, anytime. It is easily among the most significant technological advancements the federal court system will ever make, yet also among the most straightforward. CM/ECF is simply information technology finally doing for us what it has been doing for the larger business community since the mid-nineties: making information easily accessible to everyone who needs it by moving it around as quickly and cheaply as possible. The only thing new about CM/ECF is that it hasn't been done before in the federal courts.

Like all large-scale information technology projects, CM/ECF invites a level of hype and abstraction that can make it seem menacingly complex to non-technical folk. However, CM/ECF is designed to be as simple as possible from the attorney's perspective and to draw only on the most basic computer skills. We can't do much about the hype, but hopefully we can spare you some of the inevitable confusion by working through why the federal judiciary is deploying CM/ECF in the first place, looking at the individual parts of CM/ECF and how they work, and ending with some thoughts on managing CM/ECF in your office.

Getting The Justice System Out Of The Paper Business

Take a moment to glance around during your next visit to the bankruptcy court, especially looking at filing shelves, people's desks, and even the judge's bench. You'll see an immense volume of paper, and you'll see that a great deal of it is in motion. Page by page, that collective paper storm constitutes the official record of the court. Attorneys cannot represent their clients without access to the record, but as a physical media—ink smeared onto wood pulp—the only way they can access paper is by

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[1] Technically, "CM" is "Case Management," which is replacing the courts' existing docketing systems, and "ECF" is "Electronic Case Files," which is how attorneys will be able to remotely access CM. However, most of the available literature and CM/ECF training materials make little distinction in separating CM from ECF, and so we'll also refer to the entire system simply as "CM/ECF" throughout this article. As of our writing, there are 35 bankruptcy courts and 10 district courts with operating CM/ECF systems. As of your reading, those numbers almost certainly are out of date and need to be adjusted upwards.

physically traveling to the courthouse. That takes time, time to get to and from the courthouse, time waiting for the file to be retrieved, time waiting for copies, and time for anything else an attorney has to do just to get access to the information contained in the file. If the attorney is not using her time to access the paper directly, then she is probably using her money to buy someone else's time to do it for her, from firm couriers to mail carriers.

The result is a tremendous amount of time and expense devoted to managing and accessing a paper record, when all that matters is the information printed on that paper. The paper itself is simply the medium on which we're recording the information. CM/ECF changes one part of the court's current business process model in order to take advantage of a new and better media: the electronic file transmitted over the Internet, stored on computers, and accessible from other computers, instead of paper transmitted over the interstate, stored in the clerk's office, and accessible only in person.

Although the phrase "paperless court" has unfortunately become identified with CM/ECF, it is important to understand that CM/ECF has nothing to do with paperless courts to the extent that phrase sounds like it means the wholesale elimination of paper from the judicial process. It is still the business of attorneys to make legal arguments and the business of judges to decide them, and that will still be accomplished by the exchange of information between attorneys and judges. Some attorneys and judges will use CM/ECF to handle all of that information electronically. However, many people will continue to prefer paper in some contexts, and CM/ECF supports that approach as well. No one is going to tell a judge that she cannot print out a paper copy of a complex filing if she would rather annotate it with a pen than a pop-up menu, and no one is going to bar an attorney from carrying paper into the courtroom if she would rather make her arguments with the aid of a trial notebook instead of a notebook computer.

CM/ECF is about a paperless clerk's office. Regardless of where paper might continue to exist for individual use, the case file and all of the information contained therein will be electronic and no longer subject to the physical limitations of paper. Documents can be filed or retrieved anytime day or night from across the street or across the country. Access is as fast as your Internet connection, and service of every filing is accomplished in seconds instead of days. However, once an attorney has access to the electronic documents she needs, the choice is hers as to how she works with them. Every online tool is at her disposal, but a paper copy of any filing is never more than a click away.

PDF: Overcoming Paper Document Faults With "Portable Document Format"

The first question regarding CM/ECF is what exactly the official record will be comprised of, if not paper. The specific electronic media used in place of paper is called "Portable Document Format" or more commonly just "PDF." Technically speaking, PDF was originally created as a proprietary file format by Adobe Systems,

Inc. and has since become the worldwide open standard for secure, format-preserving, platform-independent electronic document transfer.

Plainly speaking, PDF became the world standard and the basis for CM/ECF because it looks exactly like paper on any computer you use, and you produce PDF documents exactly the same way you produce paper ones. If you can make your computer produce pieces of paper through your printer, then you already know all you need to in order to work with PDF. To really understand that, it's easiest to look first at how you produce PDF files[2] and then how you access them, both of which we discuss in terms of Adobe Acrobat 5.0 software.[3]

PDF files are created by "printing" documents using a "printer" called the "PDF Writer." This process is identical to printing a document on any paper printer. When you produce a document in paper on your computer, you first type it into a word processing program such as Microsoft Word, and when you print it out on a printer such as a Hewlett-Packard, a stack of paper is the result. To produce a PDF file instead of a stack of paper, you would select the PDF Writer as the printer instead of your Hewlett-Packard, and a new PDF file would be the result. For example, we created this article by typing it into Word with a filename of "article.doc". When we printed the article on our Hewlett-Packard DeskJet printer, we ended up with a large stack of paper. When we printed it with our PDF Writer, we had a new electronic file called "article.pdf".

Once you've created a PDF file, you and others view it using a "PDF Reader." The reader lets you both display the PDF document on your computer and print it out into paper if you want to. This is where the real benefits of using PDF documents become apparent. First, the Reader software (as opposed to the Writer) is free from Adobe, so anyone can view PDF documents for free. Second, and even more

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[2] A quick note on "files," "filenames," and "documents" might be helpful here. A "file" is just a collection of electronic data arranged as a very large series of ones and zeroes that mean something to a computer, and a "filename" is how we humans refer to that sequence. For example, we wrote this article in Microsoft Word and called it "article.doc". MS Word made a file (a big sequence of ones and zeroes) to represent the words we typed onto the screen and assigned it a filename of "article.doc". That sequence of ones and zeroes that MS Word accessed when we told it to open the file "article.doc" was translated by the computer into the words you're reading now. In this context, we also refer to files as "documents" because they represent documents. It works the same way with PDF—when we refer to a "PDF file" or a "PDF document," we mean a bunch of electronic data that a computer will translate for us into a PDF representation of your filing.
  And why does any of this matter? Because whereas paper is now filling up our courthouses and law offices, we can store millions of the sequences of ones and zeroes that make up PDF documents on just one computer. Moreover, whereas we can only share paper between the court and attorneys by having someone physically carry it around, we can send the ones and zeroes that make up PDF documents through any Internet connection, even thin air.

[3] PDF is now an "open" standard instead of a proprietary one, meaning there are several vendors besides Adobe Systems supplying ways to create PDF documents. For example, three such vendors can be found at www.fineprint.com, www.adlibsys.com, and www.win2pdf.com. However, the most common way to create, manage, and enhance PDF files remains Adobe's own Acrobat 5.0 software, and hence that is the system we describe generically in this article.

importantly, the Reader always displays and prints the PDF document <u>exactly as you intended</u> regardless of what computers are used to view it or what printers are used to print it. In other words, whether the document is being viewed on a Windows PC or an Apple Mac, being printed onto paper, or being displayed on a courtroom's overhead monitor, it always looks exactly the same. Bold is always bold, underlined is always underlined, all the footnotes are right where you left them, and the last line of the second paragraph on the third page is the same for every person viewing that file no matter what mechanism she's using to look at it.

Print to PDF or Scan to PDF, and Why It Matters

The above is easy enough when it comes to documents you create on your own computer, but sometimes you must attach, as exhibits, copies of documents that were not created on your computer, such as a contract made by the debtor. When you attach a paper exhibit, you make a copy and attach it to the pleading. When you attach a PDF exhibit, you make a PDF copy and attach it to the PDF pleading. PDF copies of paper documents are made with a scanner[4] hooked up to your computer. Scanning a PDF copy is essentially the same as making a paper copy—you drop the paper into a scanner instead of a copier and you get a PDF copy of the document instead of a paper copy. You then attach the PDF copy to your PDF filing just like you would have attached a paper exhibit to a paper filing.

Although we tried to keep this article as "non-techie" as possible, some additional discussion is warranted here because there is a difference between printed PDF files (those created with the PDF Writer) and scanned PDF files (those created with a scanner). Printed PDF documents are true electronic text, meaning you can use Acrobat's text-management abilities to work with the document more easily and efficiently. You can search for specific text in the document, bookmark text, highlight and annotate text, and you can even copy text out of the PDF document for use in other electronic documents. In contrast, a scanned PDF is just a picture of a document. It looks like text, but the computer only sees an image of the words, not the words themselves.

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[4] Scanners come in all shapes and sizes these days and range in price from around $45 to over several thousand depending on the desired functionality and output quality. In addition to machines that just scan, scanners also come as part of multifunction machines that are printers, faxes, copiers, and scanners all in one. The only real requirement for Adobe Acrobat is that the scanner be "TWAIN compliant." TWAIN refers to the interface through which the scanner communicates with the computer, and you should never have to worry about this because it's very hard to find a scanner that isn't TWAIN compliant these days. And for you IT acronym buffs, "TWAIN" is just the name that got attached to the functionality early on and has stuck with it ever since—it doesn't stand for anything in particular, although "Technology Without An Interesting Name" has become popular. Finally, another geek-speak term for scanning in this context is "imaging" because technically you're creating a PDF "image" of the document that you scan in. However, "imaging" means exactly the same thing as "scanning" for our purposes here. Anytime you hear either word, just think of feeding pieces of paper into a scanner and having them appear on your computer as a PDF file.

Because you can create PDF files either by printing directly to PDF or by scanning a paper copy into PDF, confusion often arises over which is the better way. The best way is to scan only when you absolutely have to, which will usually be when you have to file exhibits that you only have in paper form. Some people opt for an alternative method of printing the pleading onto paper, adding paper copies of the exhibits, and then scanning the entire packet back into PDF. We recommend against this for several reasons. First, it's a matter of presentation. Your filings will look much better if you print them directly to PDF than if you scan them, because electronically-generated text will always display more clearly than electronically-copied text. The second reason is simple workflow management—printing directly to PDF is much faster than scanning to PDF. The third reason has to do with the size of the resulting file. Scanned PDF files are roughly five times larger than printed PDF files, which means they use up five times more disk space, and take five times as long to transfer over the Internet. Fourth is the limitation of scanned PDFs discussed above: other people can't use Acrobat's text-management abilities on your filings if you scan them instead of printing them directly to PDF.[5] The final reason is that giving the judge in your case a scanned filing that isn't as clear as it could be, that is five times slower than it had to be, and on which she can't use text-management tools to handle the file more efficiently, is just bad advocacy. On the larger issue of whether the court will even accept a scanned filing, two circuits have already decided they will not,[6] and other courts are likely to follow suit.

Moving PDF Documents Around: The Judiciary's Lane Of The Information Superhighway

Once we have PDF files instead of stacks of paper, we still have the issues of how to get our PDF filings to the courthouse and hence officially "filed" for purposes of the record in our case, and how to access filings made by other attorneys or the judge.

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[5] Just to avoid any confusion, there is another scanning trick called "OCR" that some of you might be wondering about at this point. OCR stands for "optical character recognition," which is a software system that scans a piece of paper, and then analyzes the resulting image in an attempt to convert that picture of text back into real text that the computer can understand. There seem to be a growing number of people (mostly vendors) talking about it, but you probably will not need OCR for mainstream CM/ECF. There is never any reason for you to OCR your own filings because you can already print them directly to PDF, and it is hard to imagine a scenario where you would need to OCR a scanned exhibit (you'll see in the next note where some courts already have rules requiring printed PDFs instead of scanned PDFs, but these rules appear to apply only to the filing itself, not to exhibits that cannot be made into PDF files other than through scanning).

[6] The Seventh Circuit has been most explicit on this point to date, requiring digital versions of briefs and stating, "The electronic version must be in Portable Document Format (also known as PDF or Acrobat format). This format must be generated by printing to PDF from the original word processing file, so that the text of the digital brief may be searched and copied: PDF images created by scanning paper documents do not comply with this rule." 7th Cir. R. 31(e)(3) (2002). The First Circuit took a similar approach in making PDF the required format of CD-ROM filings and specifying that, "Whenever possible, documents shall be prepared through direct conversion from the word processor, not through scanning." 1st Cir. R. 32.1(f)(6) (2002).

Because those PDF files are nothing more than electronic sequences of ones and zeroes, we can send that information back and forth along the same information superhighway the rest of the world uses: the Internet.

The Internet is an almost incomprehensibly vast global network of connections between computers, but we only care about two of them: whatever computer you're using, and special computers at the court called "fileservers," or just "servers." Those servers are where we're going to house the PDF files that will become the new record in your case. When you use the Internet to put an electronic filing on a CM/ECF server, it's called "uploading," and when you use the Internet to get an electronic filing from a server, it's called "downloading."

In order to connect to the CM/ECF servers, you first need an electronic pathway to connect your computer to the Internet. We refer to this pathway generically as an "Internet Service Provider" or "ISP." The most relevant difference between ISPs for our purposes is "bandwidth," which refers to how much data they can move and how fast they can move it. The higher the bandwidth, the faster you can upload and download filings, but also the higher the cost. The three most typical Internet connections used by attorneys with CM/ECF are dial-up, cable modem, and digital subscriber lines (DSL). Dial-up is simply connecting your computer to the Internet via a regular telephone line, and it offers the lowest bandwidth. Cable modems connect to the Internet over your television cable, while DSL connects via special lines arranged with your telephone company, and both offer much higher bandwidth than dial-up. There also are even faster, more sophisticated levels of access.

Once you connect to the Internet, uploading and downloading are accomplished through a piece of free software called a browser, such as Netscape's Navigator or Microsoft's Internet Explorer. Whenever we "go to a website," all we're doing is typing a web address such as "www.uscourts.gov" into our browser, which then connects to that server over the Internet and displays whatever web page it finds there. If the web page is a court's CM/ECF interface, the browser will probably display an introductory message along with a place for attorneys to log into the system. Once there, you have access to the official docket and official court file—as well as the full text of every document in the file—all without ever getting out of your chair.

The other Internet-based communication tool used in CM/ECF is simply email, which is how CM/ECF accomplishes service in a matter of seconds instead of days. Upon any filing activity in a CM/ECF case, an email stating what was filed and when is automatically sent to all counsel of record.[7] Once counsel receives notice, she can

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[7] Federal procedural rules are presently a bit schizophrenic when it comes to electronic service. Federal Rule of Civil Procedure 5 states that "Service by electronic means is complete on transmission[,]" while Federal Rule of Bankruptcy Procedure 9036 provides "Notice by electronic transmission is complete, and the sender shall have fully complied with the requirement to send notice, when the sender obtains electronic confirmation that the transmission has been received." Fed. R. Civ. P. 5(b)(2)(D) (2002); Fed. R. Bankr. P. 9036 (2002). Although Bankruptcy Rule 9036's "electronic confirmation" requirement can be satisfied in a number of ways, the most common method for email service is the return-receipt function in which your email provider automatically sends a "return receipt" message to the court when you open the

access the filing immediately, review it as she gets to it in the course of her day, assign someone on her staff to download and print it out into paper for later, or anything else she likes. However the attorney decides to review the filing, the point of CM/ECF is that the choice is hers, and that she neither had to travel to the courthouse to look at a piece of paper nor wait a few days for the postal service to bring the paper to her.

Putting CM/ECF To Work In Your Firm

Implementing CM/ECF is only a matter of putting the above parts together in whatever way works best for your firm. Keep in mind that the essential pieces are: (1) a way to produce PDF files; (2) a scanner; and (3) an ISP. The premiere way to produce and manage PDF files is Adobe's Acrobat 5.0 software which presently costs around $250 (excluding discounts, volume licenses, etc.). Scanners come in two basic variants, stand-alone and as part of a multifunction (print/scan/copy/fax) machine, each available in several shapes, sizes, and price ranges. ISP options vary according to what is available in your area, usually ranging from dial-up for around $10-$25 per month, to cable or DSL for anywhere from $40-$150 per month, to even faster connections. Dial-up might work for infrequent filers and for occasional home/mobile access only, but it is too slow for consistent, daily use of CM/ECF. Most firms should start with a commercial cable or DSL connection.

Many firms already have everything required for CM/ECF, but most will need to add a piece or two. While you cannot skimp on the technology that makes your practice run, be relentless in demanding a sensible business reason for every dollar you spend on technology, as well as in ensuring that you are getting what you need. Most computer hardware can be returned after purchase for anywhere from 14 to 30 days, so if you need scanners, buy just one to start with and try it out. If you don't like it, return it and try again. Most computer software cannot be returned after it has been opened. Adobe Acrobat is a good idea for any firm. However, there also are other ways to produce PDF files, some petition preparation software now includes PDF functionality and systems that automatically open cases and upload petitions, and additional CM/ECF after-market products will become available as more courts deploy and vendors see opportunities. When considering any such software, test it to make sure it works both with your firm and with your court. It is the same with ISPs in that many offer month-to-month service, but even the ones who require an annual contract probably still offer an up-front trial period.

In setting up the technology, don't forget the most important component: the people who operate it. The court will train you as an attorney to use CM/ECF, but it will be up to you to make sure your staff knows things like how to print PDF documents, how to scan and attach documents, how to organize those files on your system, and

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email. This requirement is also found in Phase II of the Bankruptcy Noticing Center's Electronic Bankruptcy Noticing project (EBN Phase II), which hosts a website where you can view a representative list of email providers that support the return-receipt function, and also a web utility to see if your current email provider does: http://www.ebnuscourts.com.

anything else you want them to know in order to make CM/ECF as useful as possible in your particular firm. For example, to use Adobe Acrobat to print a PDF document from your word processor: (1) go to the print menu; (2) select the PDF Writer as the active printer; and (3) type in the filename of the new PDF file. To scan an attachment into PDF: (1) open Adobe Acrobat and put the paper into your scanner; (2) click on File, Import, and Scan; and (3) follow the dialog boxes on your computer screen and save the new PDF file. Because the tasks are simple and straightforward, your firm's training program can likewise be simple and straightforward, but you must still develop a systematic way to ensure your staff has the skill sets they need.

Where To Go From Here

CM/ECF is steadily gaining steam around the nation, and more information and training resources are available every day. The best place to find information about CM/ECF is the court you practice in, and most bankruptcy courts are still in the planning and preparation stages of deployment. The second best place to find information is on the websites of courts that have already deployed, many of which have published substantial training materials on their sites—Missouri Western,[8] Wisconsin Western,[9] and North Carolina Western[10] have particularly good training manuals available for download and viewing/printing using the free Adobe Acrobat Reader.[11] However, new courts and new materials are being added every day. Finally, both the PACER Service Center[12] and the U.S. Courts[13] host websites that contain a list of CM/ECF courts, along with a great deal of additional CM/ECF information.

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[8] http://www.mow.uscourts.gov/Case_Information/bkecftrain.htm

[9] http://www.wiw.uscourts.gov/bankruptcy/filing_guides.htm

[10] http://www.ncwb.uscourts.gov/ecf/ecf.html

[11] http://www.adobe.com/products/acrobat/readstep.html

[12] http://pacer.psc.uscourts.gov

[13] http://www.uscourts.gov/cmecf/cmecf.html