# How to Efficiently & Safely Work from Home in the Face of COVID-19

Paul J. Unger, Esq.
punger@affinityconsulting.com

It is Saturday, January 11, 2019.  I suddenly wake up to my iPhone alarm at 4 am, after weathering my first full week back to work following New Years.  For several seconds I have no idea where I am.  The surroundings do not feel familiar.  I usually don't wake up until at least 6 am, and I am often disoriented when I awaken in various cities.  I now recall.  I am in St. John's, Newfoundland, and I need to catch an early flight back to Columbus!

I quickly get my head together, jump in the shower, pack the last of my clothes and toiletries, put my laptop and iPad in my backpack, and rush to my Uber app only to remember that Newfoundland does not yet have Uber.  I called the front desk and asked them to call for a Taxi.  As I wait outside, it is a bitter 20 degrees, icy, with 6 inches of snow on the ground.  I jump in the taxi and head to the airport.

I can't remember exactly where I was that day when I heard that China reported the first coronavirus death, but I was in one of the airports.  I remember thinking that this sounds like another outbreak of SARS.  Admittedly, I wasn't terribly concerned, but I recall washing my hands extra-long throughout the long day of travel, and paid special attention to not touching by eyes, nose or mouth, a practice that I have grown accustomed to traveling 150-250 days a year.

I woke up that next Monday, and every day until March 6th, got dressed, and headed into the office or the airport.  I took for granted the pleasantries of human interaction, abundant toilet paper, and my treasured high-fiber English muffins that I still can't find on the empty store shelves.

As COVID-19 stories continued to surface in February, I became more and more of a germophobe.  I recall seeing more people wearing masks in airports and staying far away from them.  U.S. leaders didn't seem too concerned, so I wasn't either. On March 2nd, I woke up and headed to the airport.  I wasn't feeling very well.  I had a sore throat, runny nose, and a slight temperature.  Being sick was not an option for me … not that week especially.  I was the keynote speaker for the Louisiana State Bar solo and small firm conference in New Orleans, followed by a day of speaking and then rushing to Oklahoma City for another full day of speaking for the Oklahoma Bar.  I woke up the first day of speaking in New Orleans with the worst sore throat that I could remember in decades.  I muddled through that week, elbow bumping people instead of shaking hands.  I must have gone through 4 boxes of Kleenex in 2 days.  I was a mess, but I made it though.  I woke up in Columbus on March 6th and fell right back asleep and did not get out of bed for 3 days.  I started a self-quarantine March 6th and have been home ever since. I remained sick for the next 4+ weeks.

Most of our employees are virtual.  However, I have been going into a physical office ever since my first office job in college.  Many days, I work from airports, restaurants, and hotel rooms.  Some days, I work from home.  Despite being a road-warrior, working from home full-time has proven to be much different than deciding to work from home every now and then.  Waking up on March 6th, I knew things were different.  Whether I had COVID-19 or not, things felt really bad.  I felt really bad.

Over the past 5 weeks, I fully converted to 100% virtual.  I was fortunate.  While not perfect, I had much of the infrastructure and processes in place to make it happen and help the rest of our workforce do the same.  Myself and our small task force had just rolled out a new cybersecurity plan in the 12-months leading up to this.  We were ready.  However, I know that many legal professionals were not ready.  It what seemed to be overnight, we found ourselves working from home!  What follows is a roadmap to help you get through this pandemic and keep your law practice going until we get back to whatever normal looks like.

**People, Process and Technology**

When I approach any "technology" issue, this is usually my starting point.  I've learned over the years that every technology problem is a people, process <u>and</u> technology problem.  This program involves problems taken from 4 different full-day programs, so I am including my seminar papers/manuals for these programs.

1. <u>How to Efficiently Manage your Workload – Taming the Digital Chaos</u>.  Click **HERE**.  The first challenge that I address is time and distraction management.  More specifically, how to focus at home.  I'm not just talking about dealing with spouses, children and dogs.  The larger picture here involves setting up structure and "processes" in the home office to be productive.  Moreover, on the "people" front, we have to adjust to this change.  In this regard, I strongly recommend that you focus on the first one-third of this manual.

2. <u>Fight the Paper – Eliminating Paper in the Legal Office</u>.  Click **HERE**. As many of you have now discovered, it is very difficult to work virtually unless you have figured out how to be paperless.  Moreover, effective time, task, and email management is largely dependent on you having an organized <u>and</u> complete digital file!  It isn't too late.  This entire manual is relevant to the topic of working from home.  It covers both the technology needed <u>and</u> the processes involved.  I highly recommend the entire manual and analyzing if you need to re-work one or more of the elements or steps to eliminate paper.

3. <u>Mobile Lawyering</u>.  Click **HERE**.  This manual was written by my esteemed colleague, Barron Henley and is just a fantastic extra resource with a variety of tips, tricks and processes related to mobile lawyering.

4. <u>Cybersecurity & Ethical Pitfalls of Everyday Law Office Computing</u>.  Click **HERE**.  As we work from home (and on the road), there are very important things that we need to be doing to protect client data.  This manual covers topics like cloud computing, connecting

safely to your home and public wireless networks, full disk encryption, password management, two-factor authentication, and much more.

Technology, in so many ways, has made social distancing much more achievable.  As much as I hate Facebook and other social media at times, it has allowed us to stay in touch and reach out to loved ones.  Facetiming and web meetings with colleagues, family and friends is keeping us just a little more sane, connected … and human.  Much love, my friends.  Do not hesitate to reach out with any questions.  We will get through this together.

# Tame the Digital Chaos

## Distraction, Time, Task & Email Management in an Age of Information Overload

Practical Strategies and Technology for Professionals to Gain Focus and Control of your Day and Personal Life!

# PAUL J. UNGER

# Tame the Digital Chaos
# Distraction, Time, Task & Email Management

# Paul J. Unger
# punger@affinityconsulting.com

# How to Manage Your Workload

# Distraction, Time, Task and Email Management



## I.      INTRODUCTION

> *I welcome change, as long as nothing is altered or different!*

The purpose of this seminar is simple … teach you the habits you need to make technology *your* servant and gain control of your work day and personal life.

Technology is supposed to be *our* servant.  However, for most of us, we have become a servant to technology.  We need to turn that scenario around, and make technology work for us … not against us.  Technology is controlling us in a very negative way.  Technology is supposed to be helping us do more in less time.  You've heard it … Do more in less time and go home early, right?!  If that is the case, then what happened?  In my humble opinion, we have all become so dazzled by technology that we lost common sense.  I hear comments all the time like:

*"I can't get anything done because I get so many emails every day!"*

*"My work piles up because of all my interruptions."*

*"I do better with good old-fashioned paper."*

*"I can't keep track of my tasks … I constantly let things slip between the cracks."*

I am fairly sure that managing tasks and time is a problem that has probably been around for a very long time.  Most of us wish that we had another few hours a day to get things done.  For most of us, technology has hurt us almost as much as it has helped us.  Add up

the number of emails, instant messages, smartphones, social media posts, laptop computers, tablets, and we just cannot escape the endless number of interruptions that prevent us from focusing and "being present" to tackle all that we must do in a single day.

The system outlined below combines distraction management skills with some of the time management techniques outlined by experts like David Allen, Dr. Stephen Covey, etc., but applies them utilizing technology tools for professionals in a much more simplified way. Many time management experts shy away from technology, if not outright reject it! I firmly believe this is a huge mistake. Reverting back to paper in this day and age is a cop-out, especially in the age of technology and smartphones.

## II. **DISTRACTION MANAGEMENT**

A. **Information Overload – Managing Distractions in the 21st Century:** 150 emails, … 50 instant messages, … 20 telephone calls, … 15 walk-in interruptions, … 25 social media notifications, … 50 email or internet curiosity breaks, … that totals 310 digital interruptions. Divide that into 480 workday minutes and that is an interruption every 1.55 minutes! Most studies that I see indicate that the average American worker is interrupted every 2-3 minutes. Now let's look specifically at just *internal* interruptions … In 2015, the average American worker checks Facebook 21 times per day, takes 74 email curiosity breaks, and switches tasks on a computer 564 times a day! With these numbers of external and internal interruptions, it is incredible that we get any deep level project work accomplished.

In a 2007 Microsoft Corp. study, researchers concluded that it takes 15 minutes to return back to the work that computer programmers were performing at the time of an electronic-based interruption. If we get interrupted every 2-3 minutes, and it takes 15 minutes to return back to the work we were performing, how do we get anything done during the course of the day? This is why we look at our timesheets somedays at 5 pm and see only 2 hours of billable time, but we feel like we put in a 14-hour day.

The reality is that we live in an age of information overload. We are constantly connected to the world and inundated with information. We sleep with our smartphones … we are surrounded by 24-hour news networks … social media … tablet computers … we can't escape. This is why very smart people underperform. Do you ever wonder why your head is in a constant cloud and you are unable to focus? It is called Attention Deficit Trait (ADT) and it is becoming a world-wide epidemic.

ADT is a relative to Attention Deficit Disorder (ADD), but it is very different in that ADD has a genetic component. ADT does not. ADT is environmentally induced, and in today's age of information overload, those environmental factors are technology-based. In other words, ADT is a condition that is in large part caused by the technology and connectivity that we love so much. Yes, the very technology that we love so much is causing us to walk around with foggy brains and causing us to underperform. The scary part is that no one knows the long term effects of information overload. However, some shorter term studies suggest that the problem is getting worse. More recent studies show that it takes slightly over 23 minutes to return back to the work we were performing at the time of a digital interruption.

What can we do about it? We need to rethink and realign the way that we live with technology. Listen, I love technology. It is my life and passion, but I sometimes don't like it so much, especially when it has a negative impact on productivity and my personal life. We combat ADT and overcome our inability to focus by attacking ADT on four fronts:

1. Personal Health

2. Workplace Health

3. Learning a Time, Task & Email Methodology

4. Learning Attention & Distraction Management Skills

Personal Health is important on two fronts – Physical and Mental.  Physically, we know that when we are fit, well-rested and healthy, we feel like we can conquer anything.  When we overeat, and when we are sleep-deprived, every situation sometimes seems to be doomed for failure.  As an example, we know that we cannot eat a foot-long sub full of meat and processed bread, a bag of chips and piece of pie for lunch and come back and expect to stay awake or concentrate.  From a mental health perspective, we also know how difficult it is to concentrate and be productive when we are depressed, or when we are focusing on a personal relationship that is suffering.  We can't ignore these two important areas of our personal life.  If these areas need improvement, hire a personal trainer and start exercising, and go see a therapist or life coach to help get your physical and mental health back on track.

Workplace or Organizational Health is also very important.  We know how difficult it is sometimes to focus in an environment that is negative or unhealthy.  We know how difficult it is to operate in an environment full of drama and distrust.  We need to focus on ways to improve workplace health.  I am not a subject matter expert on this, but a great starting point that I recommend would be two books – Five Dysfunctions of a Team and The Advantage, both by Patrick Lencioni.

Learning a Time, Task and Email Management Methodology is the third front that we need to address.  We need an effective way to (1) process the hundreds of digital and human interruptions/tasks that we receive during the course of a day, and (2) organize the tasks, digital information, and paper information that hits our desk.  In other words, we need a digital methodology to get organized … and stay organized. If we don't have system in place, we will operate in state of chaos.  Studies show that if we do not have an effective task management system to capture our tasks and file away that information, we continue to worry about those things, which has an enormous impact on our ability to focus.  I am an advocate of using and customizing tools like Microsoft Outlook and our smartphones to process this information.  For those of you in the legal profession, I also think that legal document management systems can be extremely helpful to legal professionals. These are tools like Worldox, NetDocuments, iManage or OpenText.

Attention Management Skills is the fourth front that we need to address.  As it relates to this, I want to share 5 Attention Management tips that are easy, practical, and will make an immediate impact on your ability to focus:

1. **Turn Off ALL Notifications.**  Notifications are bad.  Why would we give the world a hotline to our brain?  Turn all notifications off … and I mean ALL of them. In Outlook, email notifications can be turned off by navigating to File > Options >

Mail and deselecting the four different methods of notifying you when a new message arrives.
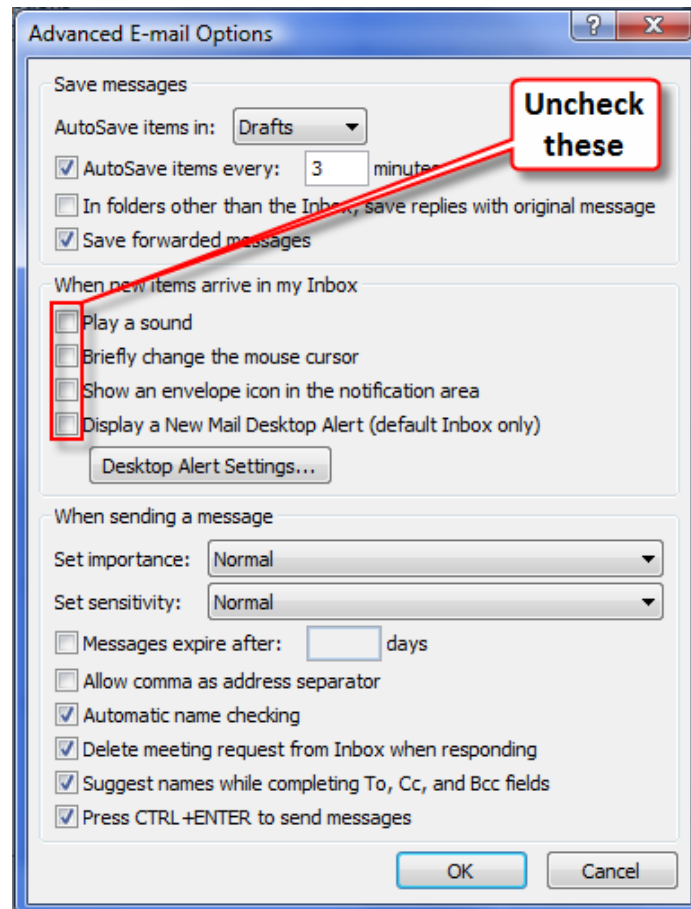


On an iPhone, go to Settings > Notifications and go through and turn off notifications by App.

2. **Practice Single Tasking.** It is not enough to say that multi-tasking is bad. We need to practice single-tasking. We need to clear our desks AND our multiple monitors of information that is not directly relevant to the project that we are executing. For example, you should always minimize Outlook on your second monitor unless you are batch processing emails, planning your upcoming tasks, or using that information for the task that you are performing. Why would you leave up on your beautiful 21" screen the single most chaotic distraction known to man in the 21st century … Email. That is insane if you think about it. Email feeds us distraction bombs every 30 seconds to 5 minutes. How can we possibly focus if we see those bombs land in our inbox? Just because we have 2 or 3 monitors, doesn't mean that we need to have something displayed on them, especially if the information displayed derails our ability to focus on the task in front of us!

3. **Pomodoro.** Pomodoro is an easy technique that utilizes the 25-minute tomato timer. We single-task (preferably deep-thought work) for 25 minutes and then take a break and do something relaxing for 5 minutes. In other words, we work in intervals. The human brain functions very well, maintaining attention to a single task for 25 minutes. After 25 minutes, we begin to lose focus. By giving ourselves a 5 minute break, we can return to deep-thought work for another 25 minutes very easily. Feel free to adjust the 25 minutes to something a bit longer if you want. I know a lot of folks who work 40 minutes or longer and take a 5-10 minute break. This technique will make a huge impact on productivity and will also help combat procrastination. Think about it, we can endure even the most tedious dreaded task for 25 minutes, right? Once we get a little momentum going and we get immersed in the project, it becomes a lot easier. One important note: Do not process emails during your 5 minute break! Take a real break and do something relaxing like getting some fresh air or water, or take a 2-3 minute walk.

4. **Tackle Deep-Thought Work Early in the Day (or when rested).** Dive into deep-thought work, writing, projects early morning. There is little question about it … our brains function better following quiet time or sleep. We also know that we can be highly productive while the rest of the world is sleeping because there are far fewer (if any) interruptions. This can be one of the most productive times of the day.

5. **Have a Plan! Daily and Weekly.** Studies clearly show that when we have a plan … a roadmap, we are less distracted. We are more focused. Start your day by taking 5-minutes to create a simple plan for the day. Identify and write down the 3-5 things that you need to accomplish. Next, time block your entire day. In other words, create an appointment to plan your entire day. Once a week, take 1 hour to do a deep dive into your next two weeks of your appointments, the past 2 weeks of appointments, your entire task list, your case/matter/project list, and convert any sticky notes to tasks.

6. **Batch Process Emails.** Studies show that the average American worker checks email 60-80 times a day. This behavior will destroy your day. How can anyone focus when they check email and process fires & bombs every 10 minutes?! It is impossible. Instead of checking email 70 times a day, be more deliberate about when you check email. Aim for 5 times a day. Everyone's situation is different, so you just need to test this out and balance the need to be responsive vs. your need to focus on billable work or project work.

7. **Have a Task List.** When you are working on a project and experience a "random neural firing", you better have a system in place to record that thought so you can get back to focusing on the task at hand! If you don't have a task list, you will (a) forget to do it, and (b) your subconscious will continue to worry/think about that task, which has a devastating impact on our ability to focus.

8. **Learn to Say No.** You don't have to be jerk when you say no. In fact, if you say no too often, you will probably be fired. However, you need to learn how to

say no, when appropriate, or learn how to professionally say you are drowning in work. One easy thing you can do right away is put limits on the volunteer and non-billable work that you do. We all need to do some, but at the end of the day, we are all unfortunately judged by billable hours. It is unfortunate, but true.

9. **Crate your Phone.** Our smartphones are killing us in so many ways. You know this is true. Silence your phone and put it in your desk drawer for 50-60 minutes at a time, unless you are expecting an urgent call. This will allow you to catch important calls/texts and be responsive, and at the same time, achieve focus while working on projects.

10. **Create Rituals.** Rituals are small checklists or short rigid schedules designed to execute the same desired tasks during a set period of time. Rituals keep you on task. They are extremely helpful because they help us form positive habits and prevent us from taking email or internet curiosity breaks. As an example, I have a morning administrative ritual whenever I am physically in the office and not speaking. It looks something like this:

✓ Eat breakfast at my desk (Oatmeal)

✓ Fish oil, garlic & vitamins

✓ Reach out to one new organization for business development (speaking)

✓ Ask a potential client or existing client to grab coffee in a city where I am speaking

✓ Review my potential new client report

✓ Reach out to past clients without active matters just to check in

✓ Check in on recent clients/projects

✓ Business social media

✓ Birthday wishes

✓ Check in with my leadership team members

✓ Check in with my partners

✓ Check in with my immediate team

Rituals also remind us to do things that we frequently forget … things that we commit ourselves to do as New Year resolutions or annual goals. By adding rituals and checklists into your life, you can greatly enhance your ability to focus and do those things that seem to always fall off our radar. I discovered an awesome App for the iPhone/iPad called Checklist Again to organize all my daily rituals.

**B.** **Pardon the Interruption:** In an eight (8) hour work day, if we receive 100 emails, that equates to receiving one email every 4.8 minutes. Sound familiar? It should, because that is the world most of us live in. Combine that with instant messages, phone calls and what I call email curiosity interruptions, that equates to one interruption every 2-3 minutes! What can you do to minimize the distraction?

Take the following quick survey:

**1.** **Interruption Survey:**

- Average number of emails you get per day: ..............................._____

- Average number of instant messages per day:..........................._____

- Average number of phone calls you get each day: ......................_____

- Average number of curiosity email or internet breaks each day: _____

- **Total Interruptions Per Day ..................................................**_____

**2.** **Other Questions to Ask Yourself:**

- What percentage of interruptions really need immediate attention?..................................................................._____

- Has technology simplified your life?          ☐ Yes          ☐ No

- Is technology controlling you?          ☐ Yes          ☐ No

**C.** **Are You Using Outlook Effectively?** Probably not. Although millions of people use Outlook, most do not use all of its functionality to their advantage. In this seminar, we'll give you some great tips for making better use of Outlook.

**D.** **How Do You Track Tasks?** At least 75% of those people polled in technology audits that I perform indicate they keep track of tasks on a piece of paper or a legal pad, and then end up transferring and combining those notes.

**E.** **Email Storage & Archival:** What do we do with all the email we get and prevent it from being such a major interruption to your productivity? There are several problems related to this:

- How should you archive old email?

- How do you deal with attachments and keep from losing them?

- How do you search for old conversations quickly and efficiently?

- How do you keep your email but not run out of server space? Why does the IT person keep telling you that you have too much email in your inbox and you're clogging up the server?

- How do we stop using our inbox as a task list?

**F.**   **Too Much Legitimate Email To Deal With Effectively:** Many people simply receive more email than they can read and keep up with. How do you sort, store and track all of this email? What can we do to reduce the amount of email that we receive?

**G.**   **Spam Getting Through:** There are lots of ways to avoid SPAM, and yet it still manages to get into our mailboxes. What can you do about it?

In the forthcoming chapters, we will address the strategies and practical solutions to these problems.

## III.  TASK & TIME MANAGEMENT

> *Are you going to embrace technology so you can master it, or are you going to remain a servant to technology?*

**Task management** is the process of capturing/recording tasks and executing them in an efficient manner.

**Time management** is how you utilize your time to execute the tasks on your plate. Although quite related to task management, they are quite different.

At one end of the extreme, there are people who know exactly the 250 items on their task list, but sometimes can't accomplish one of those tasks on a given day because he/she cannot focus and execute.  These folks tend to be over-thinkers.  They cannot execute because they get so tripped up on thinking through every scenario to the point of mental exhaustion.

At the other end of the spectrum, there are those who are excellent at executing tasks that they do, but other tasks slip between the cracks because maybe they are terrible capturers/recorders.

Most of us are poor at both because we simply have too much to do in a given day.  The reality is that urgency is a fact of life.  I have visited thousands of legal professionals over my career, and I have yet to encounter a law office that doesn't operate in that environment! Now, layer in technology, and most of us are even worse because we have let technology dazzle us to the point that we have lost most of our common sense.  I am talking primarily about email, but it extends to social media, internet use, and apps on our mobile devices. In the middle we have those of us who simply do not get to items 100-225 because we simply do not have enough time.

While technology <u>can</u> be blinding us of the solution, the beautiful thing about technology is that it can solve the capturing/recording, and at the same time make us more efficient to do more in less time.  I am also an advocate of using SOME paper (limited) in our workflow.  Sometimes it just isn't smart to use a computer monitor when paper would better serve us, … or we simply don't have enough computer monitors to display all the information that we need.

A.  **Starting Point – Gathering Everything:** The starting point to effective time management is carving out the time you don't have ;-) to gather all your tasks, goals and "random neural firings".  This includes everything from the post-it notes on your desk and in your car, to loose papers, to new lists and old lists of unresolved items and issues.  At this point, do not worry about whether you should gather it or not … just do it and err on the side of gathering it.

**B.** **Record Everything – the Master Task List:** Many time management experts develop elaborate and separate task lists. In my belief, these techniques fail because they are too complicated and there are too many lists in too many places. For task management to work, it must be simple and convenient. It cannot take you 6 months to learn and master the system! Maintain just as many lists as you need, but not too many. Think about using the following four categories/lists:

1. Client – General

2. Administrative

3. Business Development

4. Home/Personal

Start entering everything into the Master Task List. For this, I strongly recommend Outlook or Wundelist ([www.wunderlist.com](www.wunderlist.com)), integrated with Outlook.

**C.** **Why Outlook + Smartphone is the Ultimate Capture Tool:** Remember my rule. This process must be convenient and simple. Outlook is consistent with my rule because of its convenience, ease, versatility and ability to integrate with smartphones. If you cannot easily "capture and record" your random neural firing, thought or task quickly and in a central location, that task will either be lost or quickly forgotten. Outlook via Smartphones offer this solution. Before smartphones, maintaining a task list in Outlook was nearly impossible because you simply can't carry your desktop computer around and you cannot wait 5 minutes for a laptop to boot up and start Outlook in order for you to capture and record the task. Smartphones (and tablets like the iPad) are instantly available. You can use Siri on an iPhone or voice commands on an Android device to create the reminder or task. There is no boot-up process. In fact, arguably, it is faster than recording it on a random piece of paper. It is certainly better to record in on the smartphone because it can be instantly "organized" and even more importantly, instantly backed up, thus far less likely to be lost like a post-it note or a napkin.

In Outlook, enter the task as such:
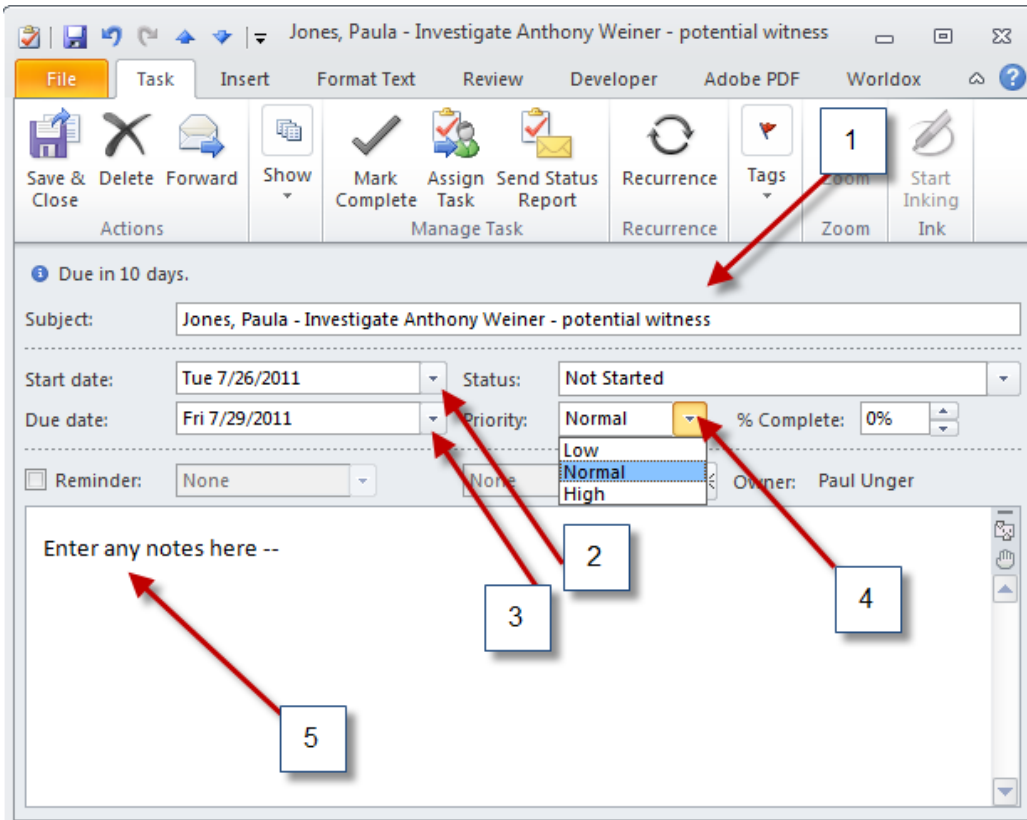


1. Enter the **Subject** starting with the name of the matter, followed by a description of the action item. By using the matter name at the beginning, you can group all tasks for that matter together when you sort the subject alphabetically, as seen here:
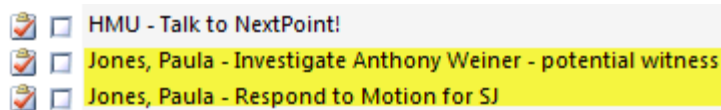


2. (Optional) Enter a **Start Date** so that you can optionally view your master list with the ability to exclude items that you do <u>not</u> need to worry about/view yet. This is sometimes helpful for those people with task lists of 100 or more items.

3. (Optional, but Recommended) Enter a **Due Date** so that you can optionally view tasks with due dates and view those tasks in different colors. Also note the **Reminder** option below that, if you so desire.

4. Set a **Priority** (High, Normal, Low). Not everything is High, despite your feeling of being overwhelmed. Should you believe everything is urgent, then pretend you are categorizing the level of urgency. So your day will consist of the following:

   a. High = Urgent + Deadlines

b. Normal = Less Urgent

c. Low = Less Urgent

d. Someday Items = These are items that are more akin to new year resolutions or goals. Add "Someday" to the beginning of the Subject line so they can be grouped together when sorted:



5. Enter any **Notes** in this area that you may find helpful or if you do not have enough room in the Subject line.

D. **Capture Tasks from E-Mail through Drag and Drop:** Many sources of tasks are from received emails. You can simply drag email onto your calendar or tasks button in Outlook and it will make an appointment or task out of it (but it leaves your original email where it was so then you can file it away – covered later).
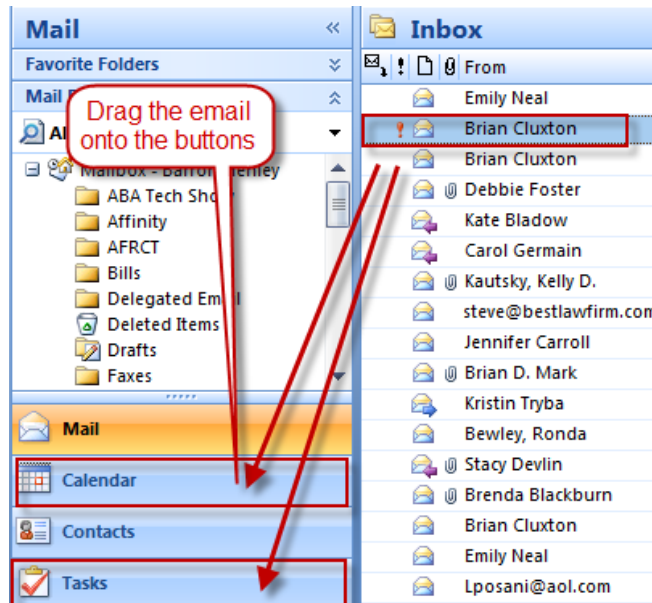


**To include attachments** from the email into the Task, simply **right-click and drag** the email to the Task module:
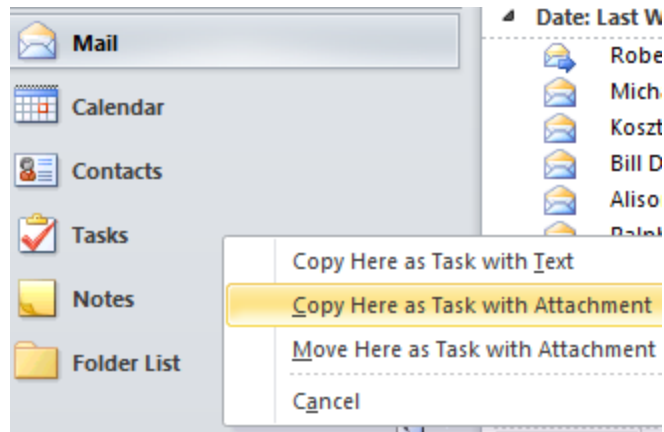
E. **Daily Task List:** Once you complete your master task list, you are ready to start developing a daily task list from the master task list. Ideally, select 3-5 items. If you accomplish those, pick another 3. A daily task list can be accomplished many ways. Here are some of the ways. Review the master task list each morning when planning the day, and:

1. Use a paper index card and write down 3-5 items; or

2. Flag items to do today; or

3. Use category/color to designate items to work on today; or

4. Print and simply highlight those items to work on today; or

5. Identify those tasks to work on today and make appointments for yourself to complete the desired work.

F. **Make Appointments for Some Tasks and Larger Project Work:** Many time management experts recommend this technique. I do like this, but it can be abused and can set you up for failure if you start ignoring the appointments or cannot get to them because the schedule is unrealistic. Be sure to also add the task to your task list. Also think about making appointments to handle emails that you have been skipping over.

G. **Views – Outlook Tasks:** As discussed above, if you name your tasks based on the matter or project first, and then a hyphen followed by a description of the work, you can sort your task list and see all the work that needs done on a particular project. Then modify your task list to show only active tasks (not completed). To do this,

In Outlook, from the **File** ribbon, select **Change View**, **Active** and the **Save Current View As a New View.**
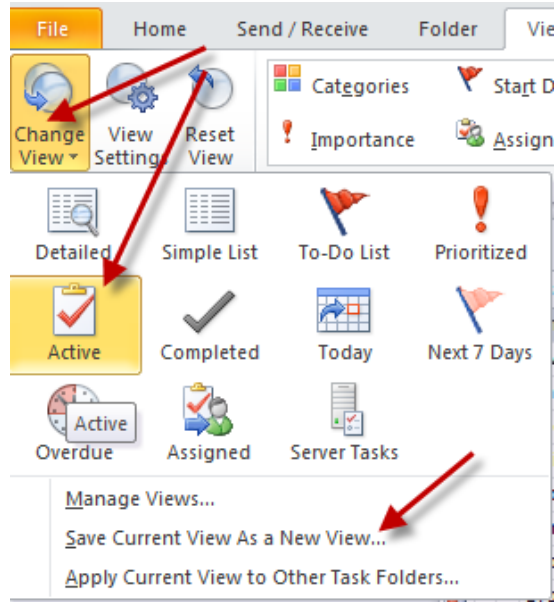
Then select **View Settings** and **Sort**.  Select Sort by **Subject**.
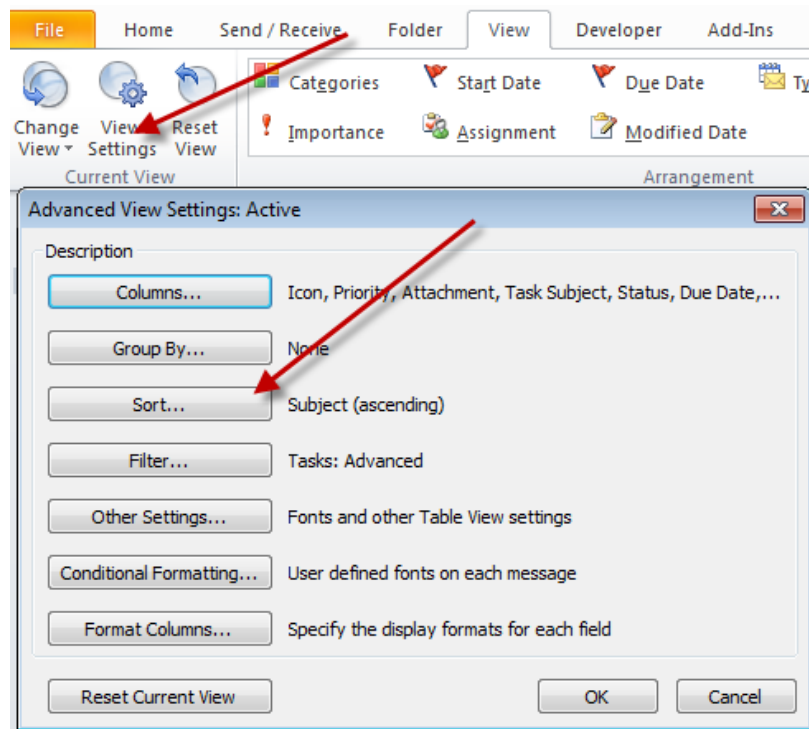
**H.** **Flags:** If you process you inbox down to zero every day and the volume of email that you receive is lower, flags can be a good tool for you. Flags can alert you to follow up on an important task or email. Simply right-click on the desired email and select **Follow Up** and then select the desired follow-up flag. Additionally, by Flagging as email, the email will automatically show up on your Task List. I use flags sparingly in email, and typically just for items that will stay in my inbox for a couple days. Otherwise, I fear that this technique may encourage people to use the inbox and its subfolders as a task list (which is something that I adamantly oppose and I discuss later).
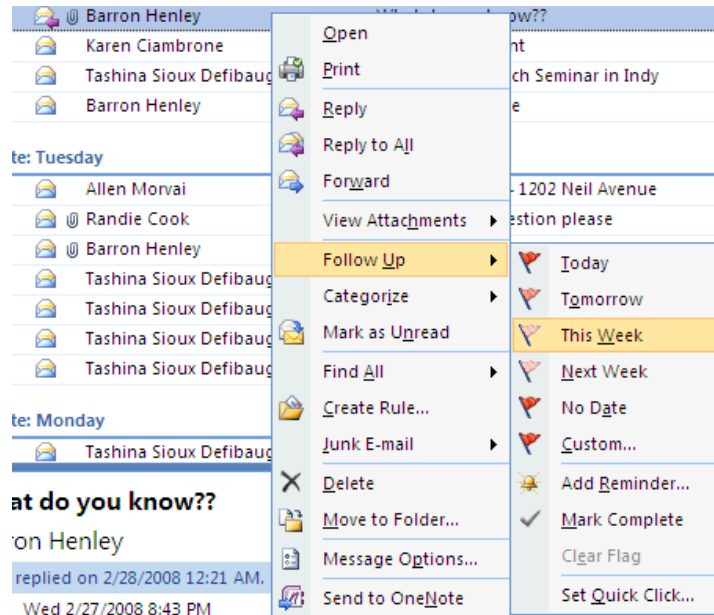


You can set a custom date as well. Outlook will notify alert you on the date and time specified.
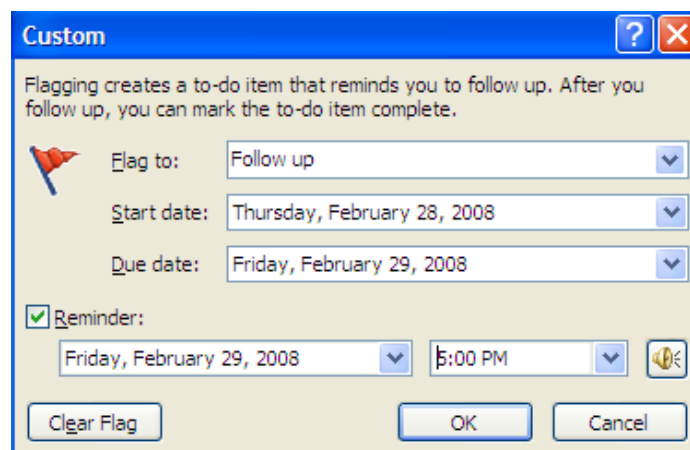


**I.** **Outlook Categories for Tasks:** (Optional) This is a feature that can help you group tasks together based on subjects (like Client, Administrative, Business

Development, Home/Personal), if you don't use separate lists. Right-click the category column next to the task item that you would like to categorize.
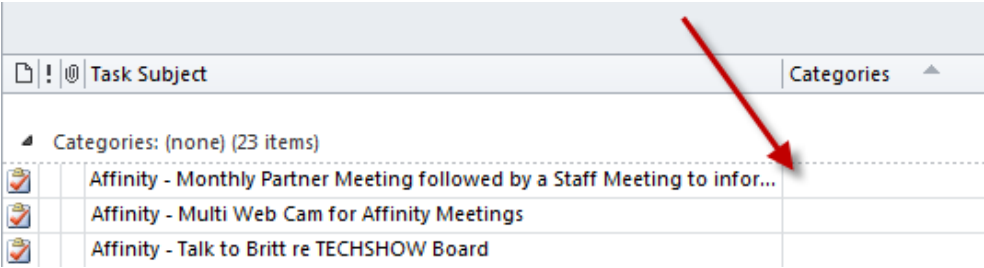


Next, select the desired color. Customize Categories and name them major areas of work so you can sort and view based on those categories.
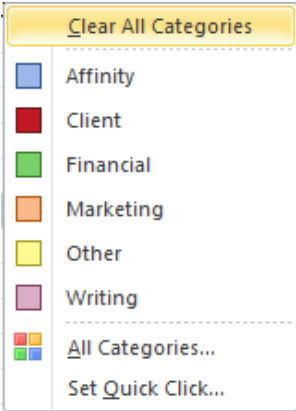
If you decide to use **Categories**, I recommend that you customize your view to not only sort based on the subject (see above), but also group the list by the categories that you create. To do this, select **View Settings** > **Group By Categories** and **Sort** by **Subject (ascending)**:
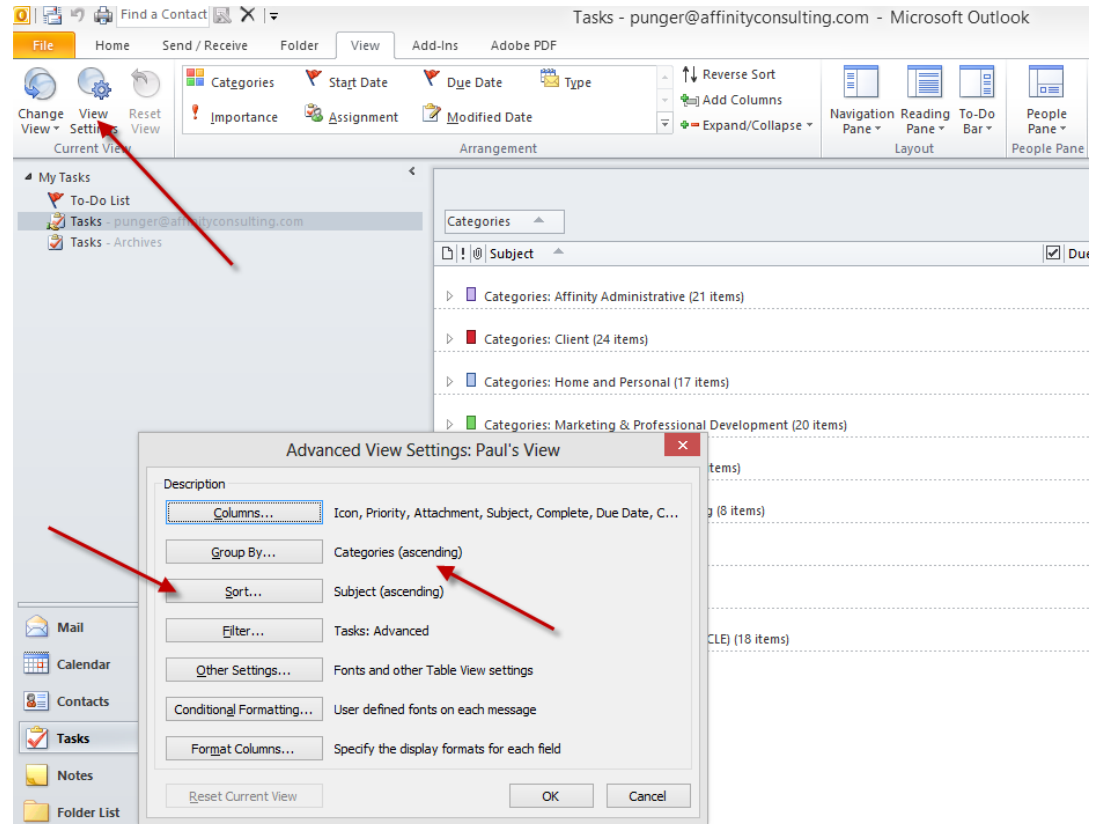
When finished, save your view:
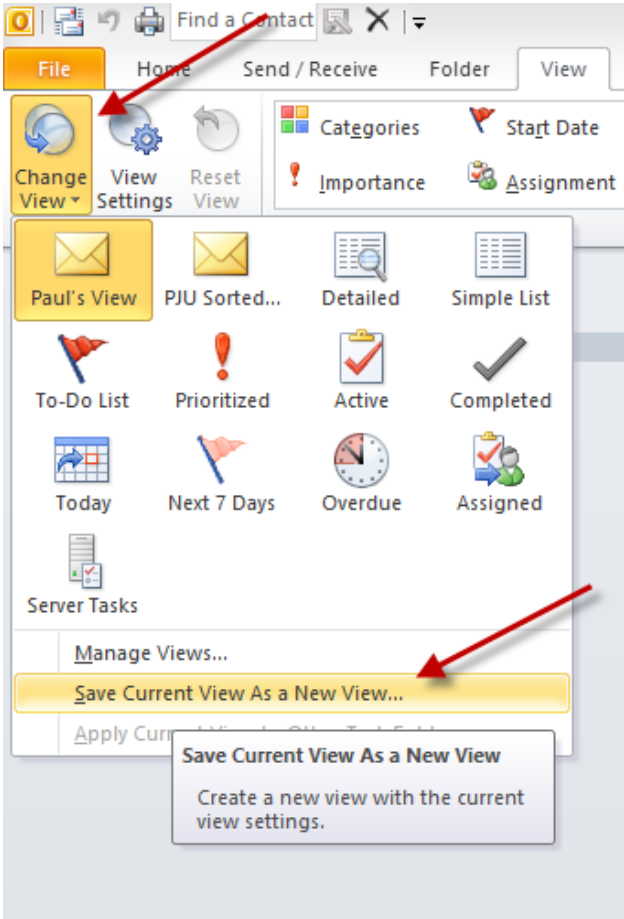
## IV.    **THE EMAIL PROBLEM**

The typical professional today sends and receives about 110 messages daily.[1]  Without question, email is one of the most important technological communication advancements of the past 100 years.  It has fundamentally changed the way we communicate with clients and the way that we do business.  We run our businesses today via email communication instead of face-to-face communication.

For some professionals, emails present a wide array of issues that most of the business world and ordinary consumers will never face.  In this seminar, we will discuss these issues and teach you how best to deal with them.  These issues or problems range from ethical considerations to email overload and time-management.  While there is no perfect solution, there are many methods to effectively handle email.

The first step to any problem is to understand the problems that exist.  We must get our arms around all the email issues that we face.  The second step is to isolate each problem and tackle each problem, without forgetting how that might affect other email problems.  For instance, controlling spam email may prevent you from getting an important email from a client if your spam filter inadvertently catches an email from a client.   In other words, when you solve one problem, it may open up a different can or worms.

## V.    **DEALING WITH THE OVERLOAD - YOUR EMAIL GAME PLAN**

A.    **Batch Process Emails:**  Most professionals need to be more deliberate about when they check emails instead of checking email 70+ times a day or leaving their Outlook inbox maximized all day long.  We need to reduce the number of interruptions (email or otherwise) so we can be more focused.  After all, how on earth can anyone get anything done with an interruption every 2-3 minutes?

Ask yourself the following question:  10 years ago, would you have let someone walk in your office every 2-3 minutes offering to sell you a product… or asking you for a favor?

Of course you wouldn't!  So, why do you let it happen now with your email?  Why do you drop everything that you are doing to read and/or respond to that email that just arrived?!  You have invested thousands of dollars in this wonderful technology that is supposed to make you more efficient, but instead it has created an interruption hotline going straight to your brain.

Some time management experts suggest checking email 2 times a day.  While this may sound like a good plan, it is unrealistic for most people.  When email was just becoming popular, there wasn't an expectation that it would be dealt with immediately, so 2 times per day was probably okay.  However, in today's age that has changed to some degree.  Entire companies communicate via email.  Email is

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[1] In 2010, a study by the Radicati Group found that business users send and receive 110 emails each day. http://www.radicati.com/wp/wp-content/uploads/2010/04/Email-Statistics-Report-2010-2014-Executive-Summary2.pdf

a way of life and the way everyone communicates.  Checking email twice a day isn't enough.  I think regularly through the day is more realistic and just as important, will make it easier for you to prevent your inbox from growing out of control.

One way to handle this is deal with email at the same time every day.  Many professionals simply cannot do this, as they live, breath and communicate via email instead of face-to-face or phone meetings.  If you can handle emails at more deliberate times, you could get more project work completed and follow a plan.  Here is an example:

1 – Upon arrival at the office:  8:00 am

2 – Mid morning:  10:30 am

3 – After lunch:  12:30 pm

4 – Afternoon:  3:30 pm

5 – End of day:  5:00 pm

B.    **Treat Email Inbox like your U.S. Mail Box – Keep it Empty!**  Would you ever keep your U.S. Mailbox in this condition with 1000+ items?  Of course you wouldn't.  So don't let your inbox get that way!  However, for most people, maintaining email is the weakest link in their system of organization primarily because of volume and frequency.  They use it as a holding bucket for undecided and unresolved tasks.

The key to mastering your inbox is to keep it empty – or under 20.  For most people, in order to process email efficiently, you <u>must</u> be able to see your emails in a single screen (or close to it).  It is very difficult and overwhelming to process emails and tasks when you are staring at a screen with 500 emails.

So what do you do with your U.S. Mailbox?  One of the best time management/organization tips that I learned and implemented nearly ten years ago is this:  Throw away your (U.S.) junk mail and advertisements before you get into the house.  Only bring mail into your house that you intend to do something with!

C.    **3 Minute Rule – DELETE, DO, DELEGATE, DELAY**

When processing or attacking your email, do one of four things with that email:  DELETE, DO, DELEGATE, DELAY.  The 3-minute rule is gold!  Any email that can be responded to or dealt with (saved in a client file, forwarded, deleted, etc.) within 3 minutes should be dealt with immediately – the first time you lay eyes on it.  This rule is based on the premise that the 2nd time you have to deal with the email, it will take you longer than 3 minutes navigate to it, open it, read it, comprehend it, re-familiarize yourself with the topic and then handle it.  So, why not just respond to it if you have the 3 minutes to deal with it!

**D. Delete - Whatever You Can Immediately!** Learn how to use the DELETE key. That could be the first thing that you do before you start dealing with email … just like <u>not</u> bringing junk mail and annoying advertising into your home. Delete the following:

- All the email that gets past your SPAM filter.

- Interoffice SPAM that is irrelevant to you.

- CCs that you don't need to save, etc.

- Jokes from annoying friends and coworkers.

- Email from people you don't like (unless it's important, of course)

> **Outlook Tip – Delete Large Chunks of Email:** Sort email based on the **From** field (by hitting the **From** column header). You can often get rid of tons of email sent from the same person. Remember that you can select a chunk of email by single left-clicking on the first email – holding the Shift-key down and single left click on the last email. Then hit **Delete**.

> **Outlook Tip – Delete Emails Permanently:** By holding the **Shift** key down and hitting **Delete**, the email will be deleted from both your Inbox <u>and</u> Deleted Items folder in one step. You will be asked to confirm if this is indeed what you want to do:
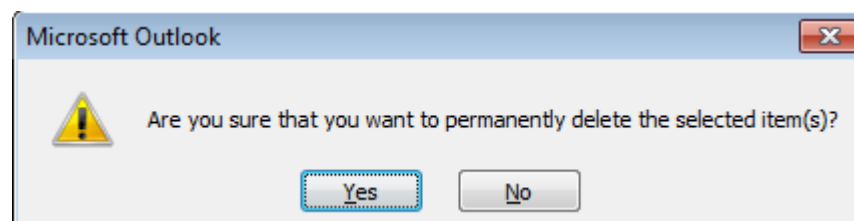


**E. Do – Just Do It!**

If you can answer the question … make the decision … provide the solution … bring it to a resolution, then just do it! Don't forget that you <u>may</u> be able to deal with it more quickly by picking up the phone or walking around the corner. Remember, an email often times invites another email.

Finally, if it is an email that is going to take a while, you should dispose of it in under 3 minutes by adding it to your task list (or calendar) <u>and</u> then saving it into the appropriate client/matter file.

**F. Delegate - If Appropriate:** If someone else should be handling the task or issue in the email, then hand it off appropriately. Don't let someone else put "the monkey" back on you, in the words of *The One Minute Manager Meets the Monkey* by

Kenneth Blanchard. You can make this easy to track by setting up the Delegated Email rule described below or use a Quickstep.

G. **Delay - If Necessary:** Already mentioned in the 3-minute rule above, if it is an email that is going to take a while, you should simply dispose of it in under 3 minutes by adding it to your task list <u>and</u> then saving it into the appropriate client/matter file.

- Do <u>not</u> use your Outlook Inbox as your to-do list by leaving unresolved email in your inbox.

- If you keep a paper-based task list, simply write it in and save the email in appropriate place.

- If you use Outlook to manage your task list, simply drag it over to your **Task** button in the Outlook navigator.

- In some circumstances, it is okay to set up subfolders under your inbox. Clean them out on a weekly basis.

- If you schedule your tasks as appointments, add it to you calendar.

H. **Outlook Views Which Will Help:**

1. **To See More Email In One Screen:**

   a. **Turn Off Viewing Pane:** This occupies a lot of screen space that could otherwise be displaying email. To turn it off, click the View menu ➦ Reading Pane ➦ Off.

   b. **Turn Off Date Grouping:** By default, Outlook groups your email by date received. The date categories just occupy space and prevent you from seeing all of your email on one screen. To turn it off, click the View menu ➦ Arrange By ➦ uncheck Show in Groups.

   c. **Turn Off Viewing Pane:** This occupies a lot of screen space that could otherwise be displaying email. To turn it off, click the View menu ➦ Reading Pane ➦ Off.

## AutoText for Frequent Email Repeat Responses

We all have responses that we constantly have to retype or we spend 10 minutes looking for a similar email that we drafted recently to another person. We automate the creation of documents, so why wouldn't we automate the emails that we frequently draft. Instead of wasting this time, create an AutoText entry in Outlook to automate the response!

- Find the "model text" that you want to use as the AutoText entry. Copy it into your Windows clipboard (select and hit CTRL-C).

- Draft a new email and paste it into the body of the new email. Format it and clean it up. I suggest removing any client names … make it generic.

- Select the text and then select Insert > Quick Parts > AutoText > Save Selection to AutoText to AutoText Gallery.
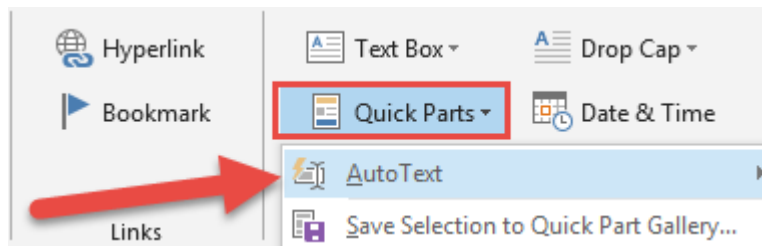


- Give it a name (nickname) with at least 4 characters.

- To use the AutoText entry, simply place your cursor in the body of the email (in the desired location), and then type the first 4 characters of the AutoText name. You will see a pop-up preview of your entry. If you want to insert it, simply hit your **Enter** key. Another way to insert it is to select **Insert > Quick Parts > AutoText >** and then select the AutoText entry from the preview gallery.

## VI.    LEARNING THE NUTS & BOLTS OF OUTLOOK EMAIL

### A.    Main Storage Problems:

1. **Disorganization:** Most people have hundreds or thousands of unrelated messages in their inboxes. This is equivalent to taking all of the paper out of your files and throwing it on the floor of the file room. The point is, if it's not organized, then it's mostly useless.

2. **Storage Space Limitations:** You may have been scolded by your IT folks about this. If you're using Microsoft Exchange on your server, then it can get overloaded with the quantity of emails and attachments you keep in your inbox and Outlook folder structures. If you don't have Exchange, then all of those emails (and contacts, and appointments and tasks) are stored in a PST file on your hard drive or the server. The bigger that database, the slower your computer will run. Of course, the database can also over-run your storage capacity.

3. **No One Else Can See Your Email But You:** In most cases, if you have an important client communication in Outlook, no one else in your office can see it. In many cases, we want to share this information, but don't know how to do it.

4. **Difficulties Searching:** Many people complain that it's nearly impossible to efficiently search old emails for a particular conversation. What can you do to make this task easier?

B. **Start by Organizing the Inbox:** Setting up folders and using Rules is a great way to start to organize your Outlook.

1. **How To Set Up a New Email Folder:** To Setup a new Subfolder in your Inbox, right-click the Inbox (or your mailbox) ➜ New Folder. Give it a name and make sure it will contain Mail and Post Items. Then click OK.
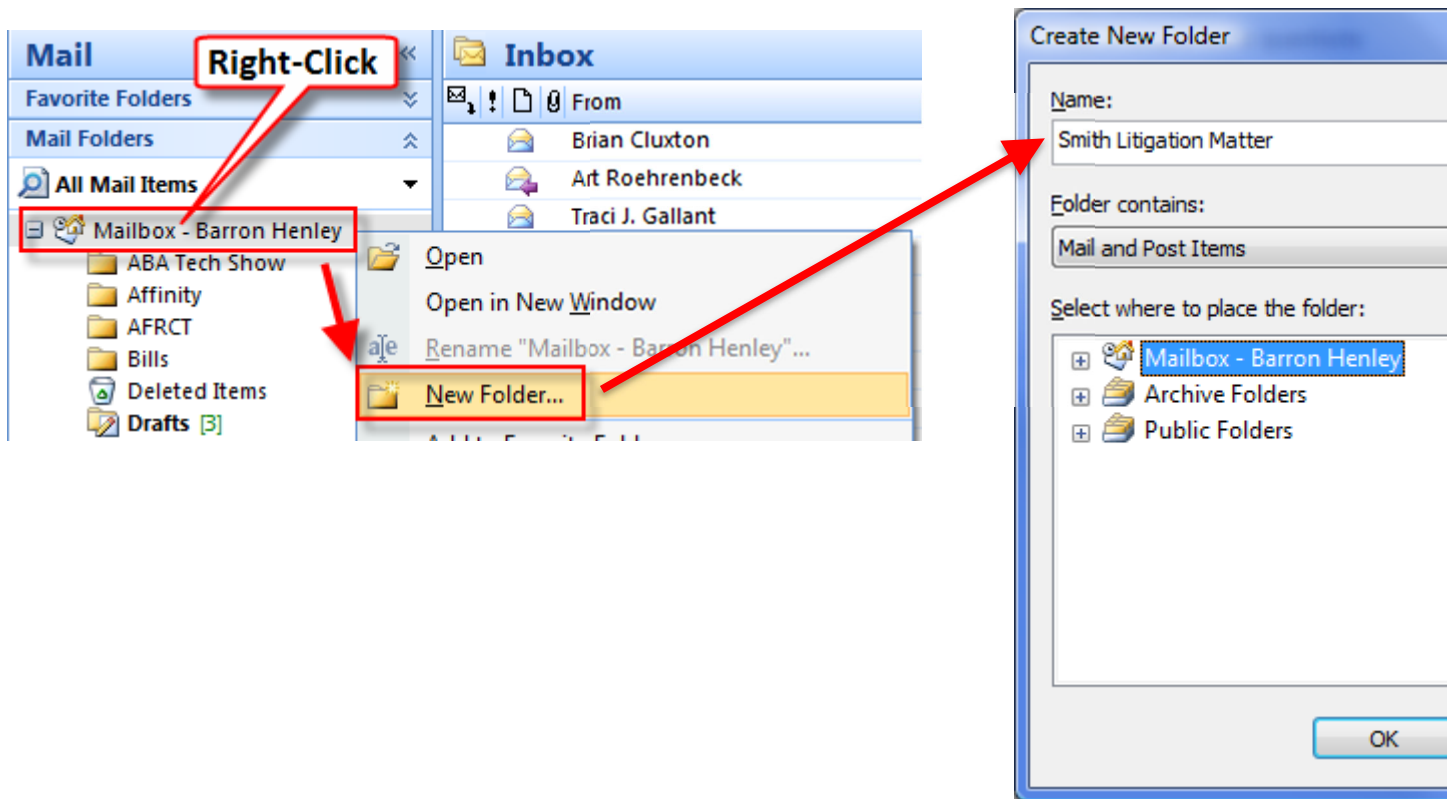


2. **Outlook Rules:** Rules allow you to auto-process incoming email (among other things). Here's how you set one up:

- Click the **Tools** menu➜**Rules and Alerts**.

- Click the **New Rule** button.
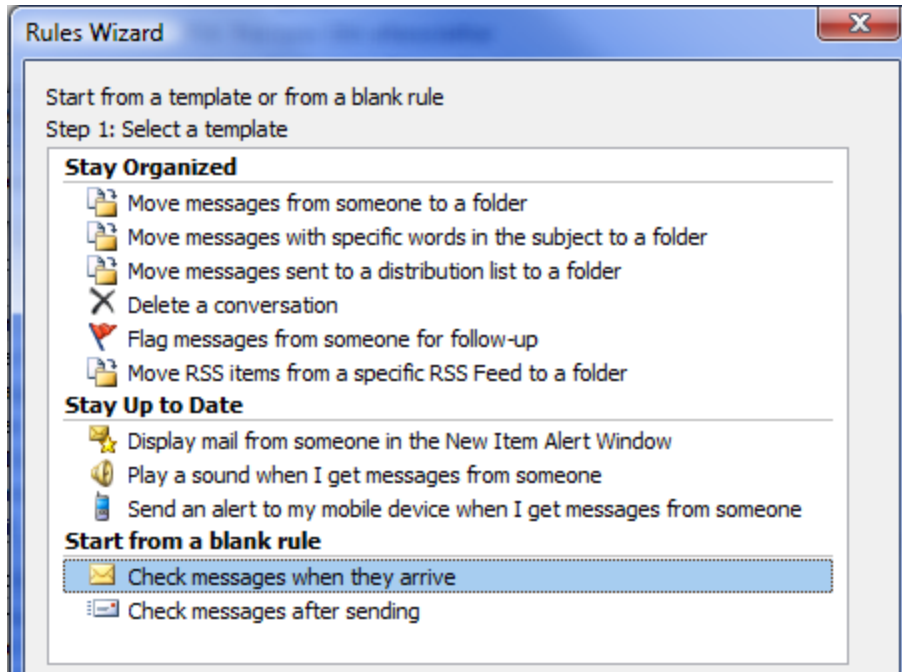
- Follow the steps for selecting the Condition, Action, Exceptions, then give it a name and make sure the rule is turned on!

3. **Sample Rule - Delay Sent Mail By One Minute (in case you change your mind)**

- In Outlook, click on the Tools menu ➔ Rules and Alerts ➔ New Rule button.

- Under "Start from a blank rule," choose "check messages after sending."

- On the next screen ("which conditions do you want to check"), don't check anything (you want this rule to apply to every email you send) and click the Next button at the bottom. You'll see the following dialog (click Yes):
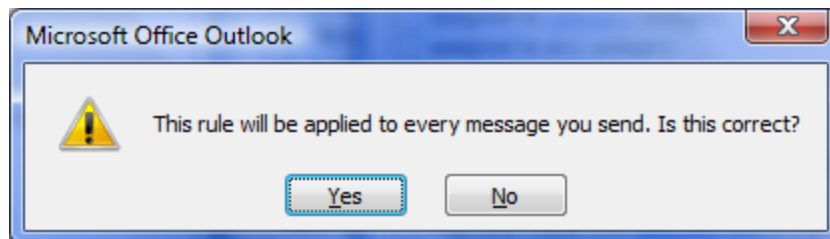
- In the next screen, check "defer delivery by a number of minutes," and then click the hyperlink for "a number of" at the bottom of the screen and enter the number of minutes you want to delay your email.
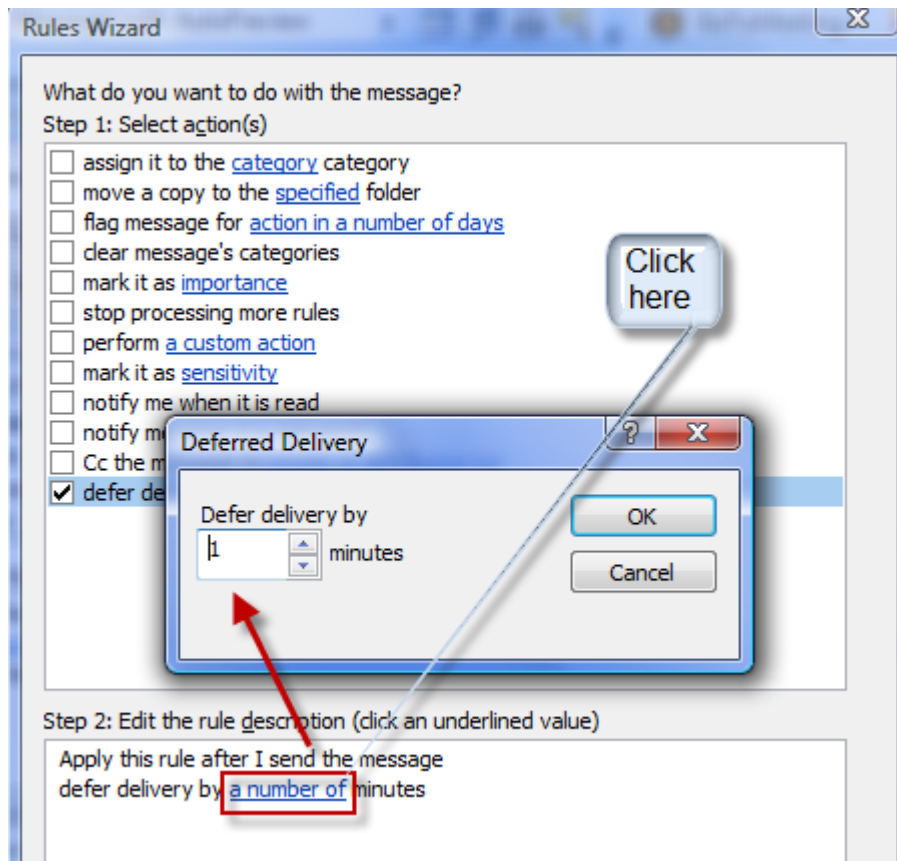


- Click Next and add any exceptions (for people you don't want to delay email to).

- Click Next, name your rule Delay and click Finish.

4. **Sample Rule - Keep Track of Delegated Items and Email:** We constantly delegate tasks to folks via email. We also ask people for information, but we have a difficult time remembering to follow up on those items, resulting in things slipping between the cracks. One way to track those items is by creating an Outlook Rule to "capture" all those items that you are expecting others to do for you. Here's an Outlook Rule that will help. We are creating a rule that will look for emails where you are the sender and where you copied to yourself. It will take those emails and automatically route them into a folder called Delegated Items, so you have a dedicated folder with just those items that you can review once a day. I usually forward those emails to people and ask them to update me on the status.

Here are the steps:

- First, create a folder in Outlook called "!Delegated Items". Use an exclamation mark at the beginning of the name if you want so it floats to the top of your Inbox subfolder list:
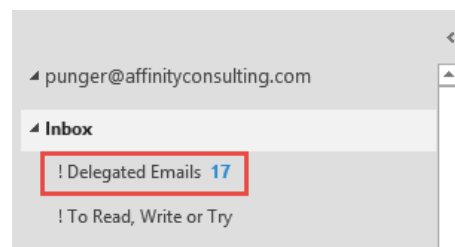


- In Outlook, click on the File menu ➜ Manage Rules and Alerts ➜ New Rule button.

- Choose "Apply rule on messages I receive" (that translates to "Apply this rule after the message arrives") and click Next at the bottom of the dialog.

- Under "Select Conditions", check BOTH "from people or public group" and "where my name is in the CC box." At the bottom of the dialog, click the hyperlink for "people or public group" and add your email address. We're basically creating a rule that will look for emails from you and copied to yourself. Click Next.

- Under "Select Actions … What do you want to do with the message," choose "move it to the specified folder" (and if you want, "Flag for Follow-up". Flag for follow-up will automatically add the email to your Task List). Make the specified folder your Inbox for Delegated Items folder, if you haven't already. Click Next and add any exceptions (probably none). Click Next, name it (something like "Delegated Items") and click Finish.

Your final Rule should look something like this:

Rule description (click an underlined value to edit):

Apply this rule after the message arrives
where my name is in the Cc box
  and from Paul Unger
move it to the ! Delegated Items folder

## C. Conditional Formatting to Apply Color to Emails.

Sometimes you may like to automatically apply color to important email. This is <u>not</u> done with a rule. Instead, you use conditional formatting.
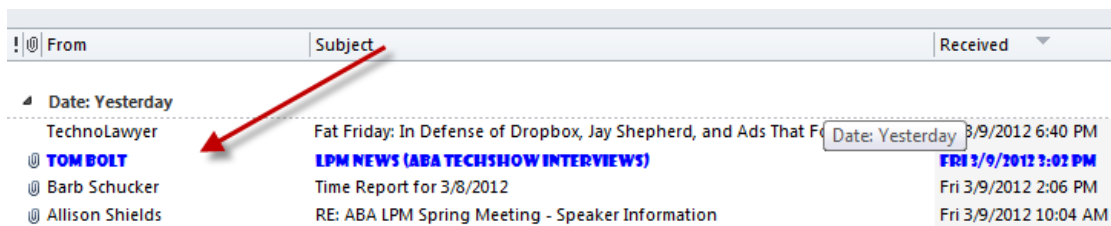


Here is how:

1. In Outlook Email, go to the **View** ribbon. Select **View Settings.** Next, select **Conditional Formatting.**
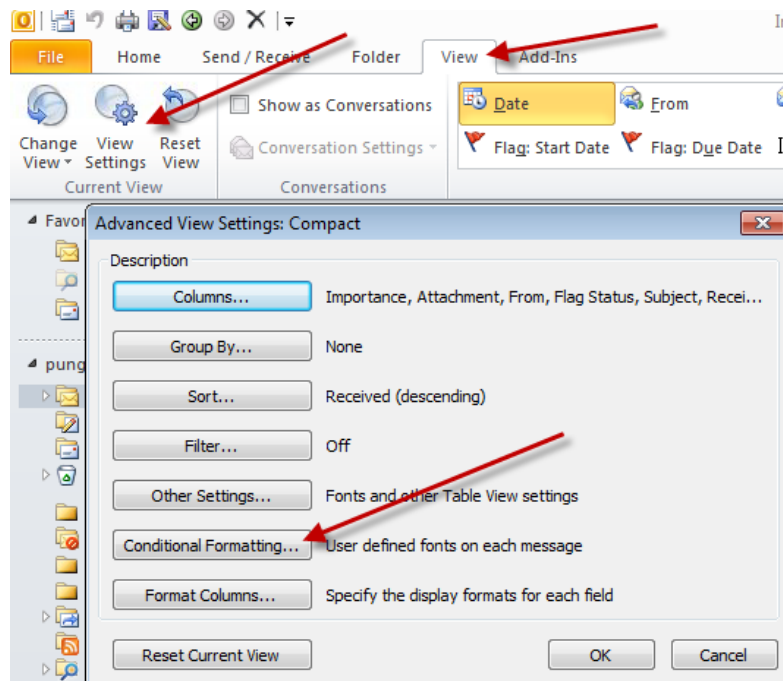


2. Select **Add** and give it a name. I called mine below "Tom Bolt" because I want all emails from Tom Bolt to turn BLUE in 8 pt Showcard Gothic Font. Next, select the **Font** button to select the desired font, color &

size. Finally, select the **Condition** button.
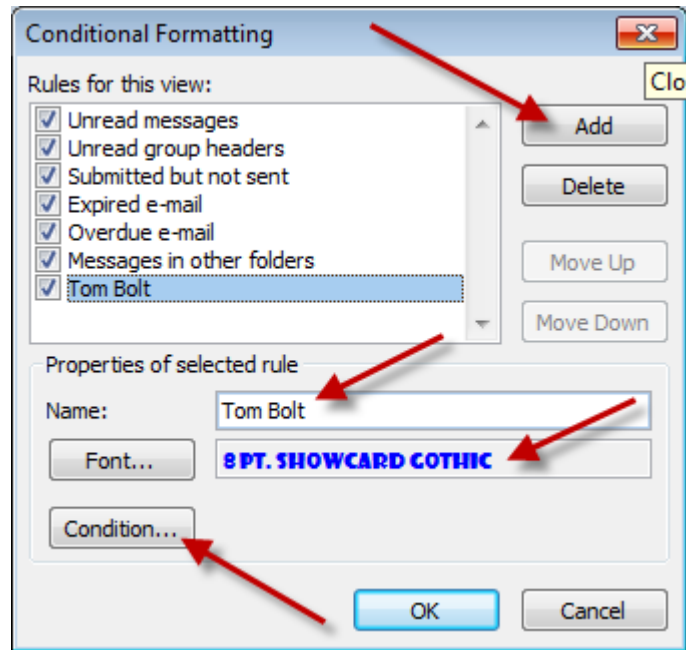


3. Set the condition. I selected a specific sender. You can set your own condition, such as all emails where the subject line contains "ABA".
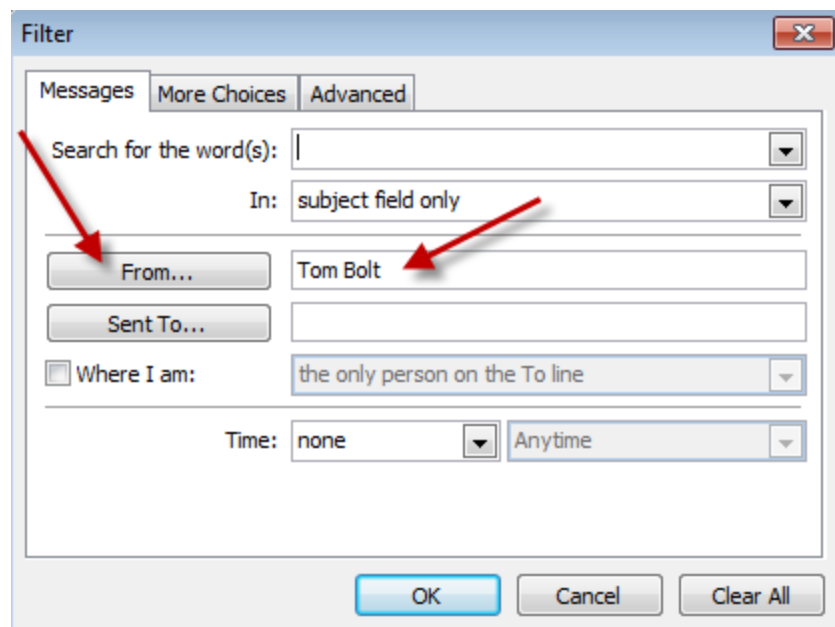
D.  **Outlook Add-On Programs To Help You Sort and Store Your Email:** There are many third-party programs that integrate with Outlook which can help you organize, sort and store your email (both incoming and outgoing). The major downside to these programs are that the email gets saved in your Outlook Mailbox, which is a huge problem because (1) no one else can have access to those emails (big problem in law firms, and (2) you are encouraging the saving of emails in Mailboxes that are probably already nearing or over Outlook's capacity). With that huge, caveat, below are a few to options:

1.  **SpeedFiler by Claritude:** See www.claritude.com. This program will auto file incoming and outgoing messages and has sophisticated search functions. It has a 30 day free trial, and it's $25/$40 to buy.

2.  **SimplyFile by TechHit:** See www.techhit.com/simplyfile. This program will auto file incoming and outgoing messages. It has a 30 day free trial, and it's $40 to buy. TechHit also sells a program called EZDetach which helps you manage attachments to email and it will work in conjunction with SimplyFile.

3.  **Xobni:** See www.xobni.com; find people, email & attachments instantly; it's FREE.

4.  **Sanebox:** See www.sanebox.com; Sanebox service that automatically sorts your email into several folders based on each email's importance, which is often determined by the sender. For example, it can automatically route email newsletters that you want and subscribe to, into a Read Later folder without have to set up an Outlook Rule. It learns your preferences based on your behavior.

E.  **Archiving Old Outlook Email:** Many Outlook users end up with an enormous accumulation of email in their Sent Mail and Deleted Mail folders. Furthermore, some mail is sorted into subfolders and forgotten about. All of this will start to bog down servers and PCs as those databases of emails get larger and larger. Thankfully, Outlook has an excellent way to dealing with this problem - AutoArchive. In a nutshell, AutoArchive will allow you to a) permanently delete expired items; b) delete or c) archive old items to an archive file (archived database). Conveniently, the first time AutoArchive runs, it creates the archive database for you. It is stored on the C:\ by default so you'll either want to move it to a server folder or back it up directly from your C:\. Once it has established itself, you'll see the Archive folder in your Outlook Folder List. There are two sets of AutoArchive settings: global settings and per-folder settings.

1.  **Turn AutoArchive On or Off.** Click the Tools menu ➜ Options ➜ Other tab ➜ click the AutoArchive button. At the top of the following dialog, you'll see "Run AutoArchive every __ days." If you uncheck that box, it

will not run.  As you can see from the following screen shot, you have many options for this:
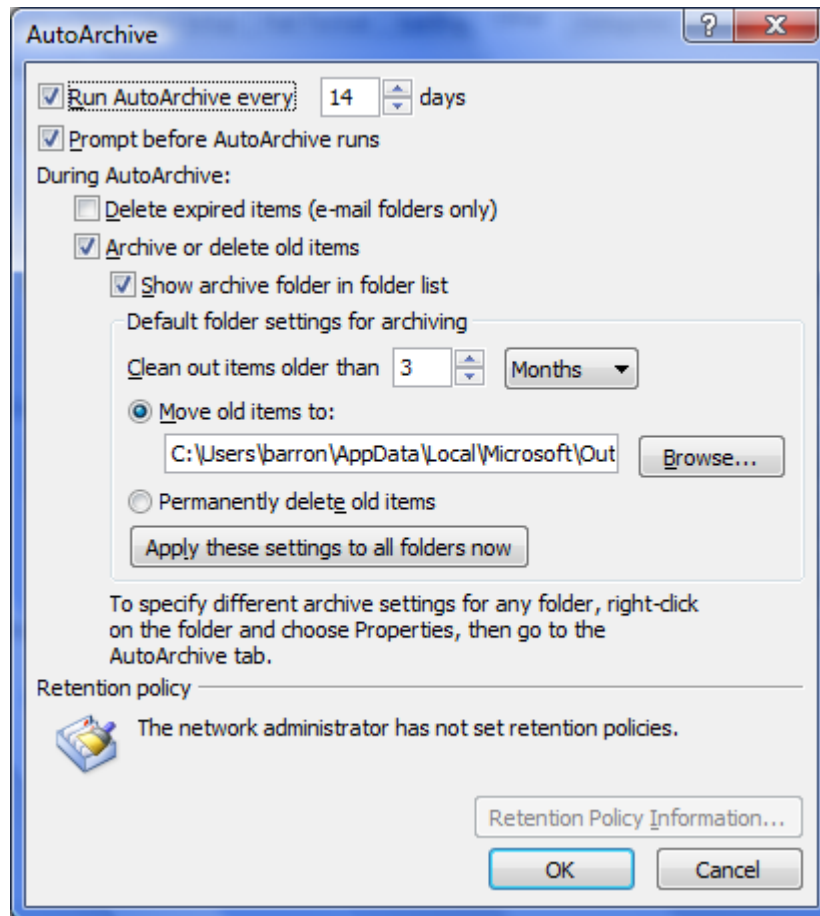


Note that these are your default (global) AutoArchive settings.

**2.** **Control the Archive Settings of a Specific Folder:** You can control what any particular folder does in Outlook by following these steps:  Right-click the folder ➔ choose Properties ➔ click the AutoArchive tab ➔ Make your changes and click OK.

**F.** **Saving Email Messages Outside of Outlook:** When an email message is in your Outlook inbox, it's just a record in a database and *not* a discreet document like a Word file.  That fact is a big part of the problem associated with organizing and storing them.  Email related to a particular matter is stored in one place; and word processor files related to that matter are stored somewhere else.  However, you can create documents out of those emails and those documents can be stored with every other document related to a particular matter or issue.

**1.** **Saving Email as You Would Save a Document:** The classic problem that organizations have if they do not own a document management system is saving and finding matter or project-specific email.  Why?  Because people (1) keep them in their individual inboxes, or (2) save them in subfolders

within their own inbox (which no one else has access to), or (3) delete the email altogether. Email is valuable correspondence that in most circumstances should be saved in a central location where everyone in the office can have access to it.

As it turns out, you can save email much like you save a Microsoft Word document clicking the File menu ➜ Save As. I recommend that you save emails as a **Outlook Message Format (*.msg)** format.

2. **Saving Email By Dragging Into a Windows Explorer Folder:** You can clean out your inbox or subfolders under your inbox by cascading the windows and simply dragging and dropping all of them into the desired folder. This will COPY the emails over into that folder, saving them automatically as MSG (native Outlook Message Format) files, which preserves the metadata and all attachments.
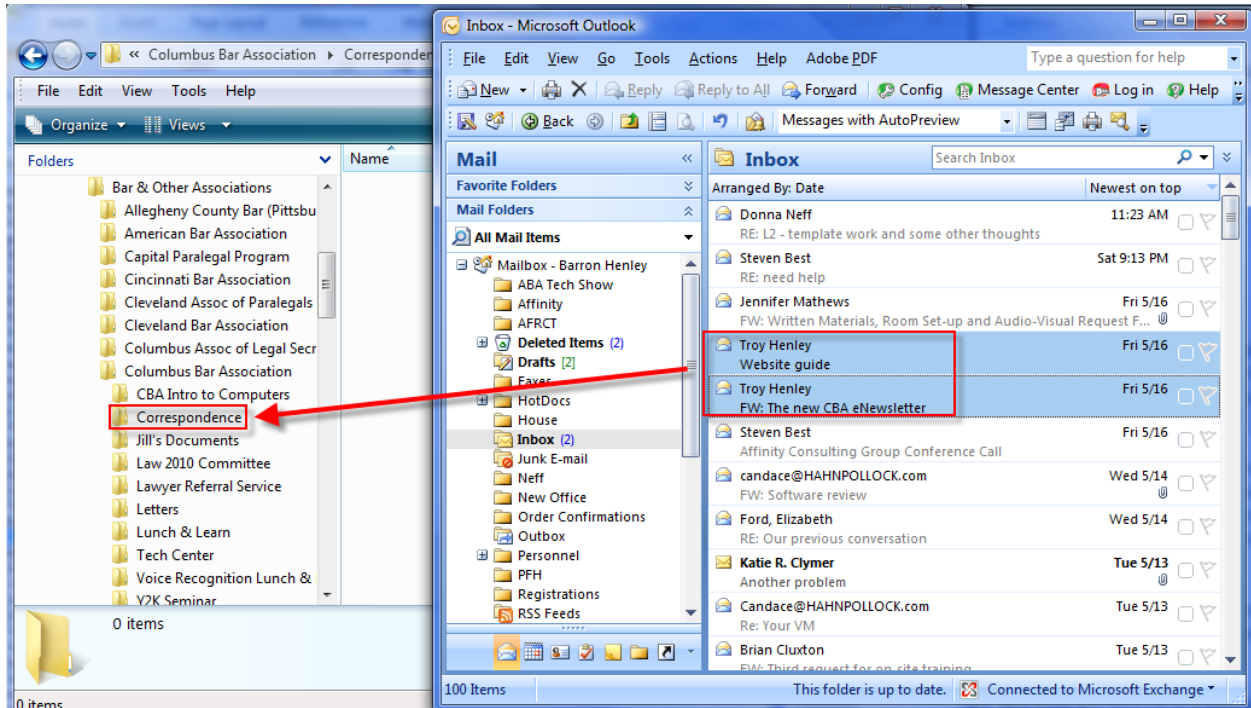


3. **Saving Email With Document Management Programs (DMS):** While document management programs (Worldox, Interwoven Worksite, NetDocuments, etc.) were originally thought of as only word processing document repositories, that is no longer true. They can now store just about any type of computer file (word processor, PDF, TIF, email, JPG, etc.).

4. **Worldox Example:** Using Worldox as an example, it provides 3 different ways to save emails (see below). Once profiled and saved, the emails are stored within the client/matter structure and easily searchable and accessible

by anyone who uses the document management system (Worldox, in this case)..  It's also important to note that you can save them one-at-a-time or large quantities of them all at once.

a.    **Save Email From Within Outlook - Drag and Drop:** Saving to Worldox from within Outlook – Drag and Drop on the Worldox "folder" for a particular matter.
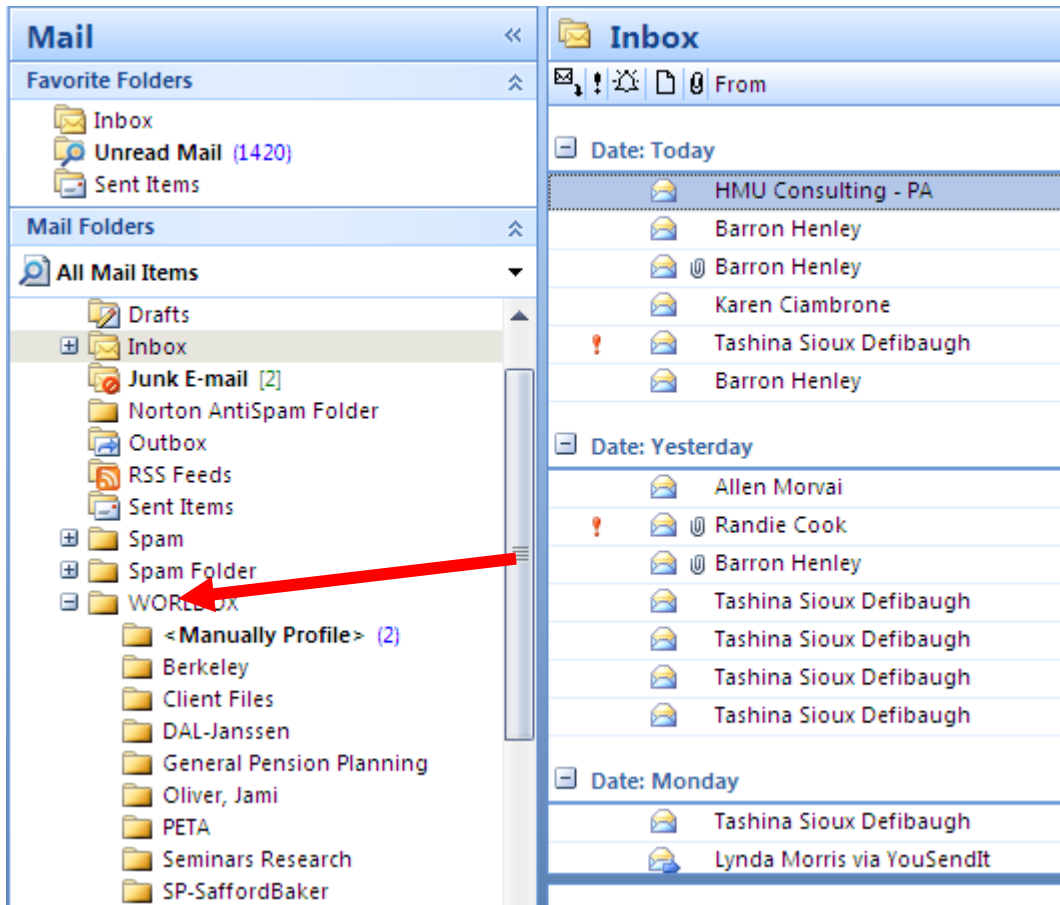


b.    **Save Email From Within Worldox - Copy or Move Buttons:** The Worldox/Outlook integration also provides **Copy To Worldox** or **Move to Worldox** buttons (located in the toolbar region of Outlook).  Simply select the email(s) you want to save into the system, then click the appropriate button shown below.
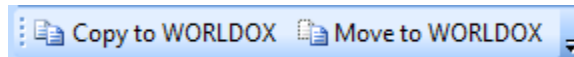
     **c.**     **Save Email From Within Worldox:** Saving email from the Worldox Email Tab which allows you to see your Outlook inbox from within Worldox.
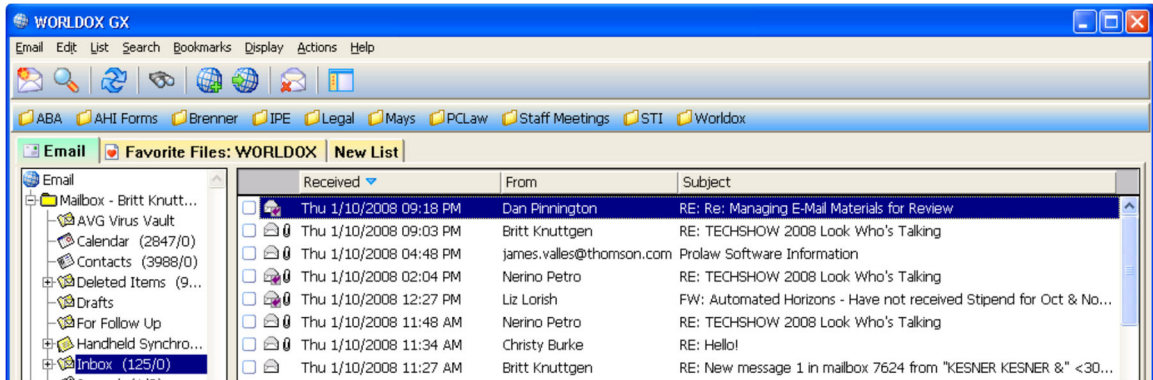


     **5.**     **Saving Email as PDF Files:** If you have Adobe Acrobat, it installs a few plug-ins in Microsoft Outlook. For those that wish they had a good way to archive and store emails and attachments, this integration can be appealing. The downside of this method is that the email is no longer a native Outlook message, and it loses some of its valuable metadata. You can't open it and reply or forward it from Outlook. It is now a PDF. That isn't the end of the world by any means, but it is a potential downside.
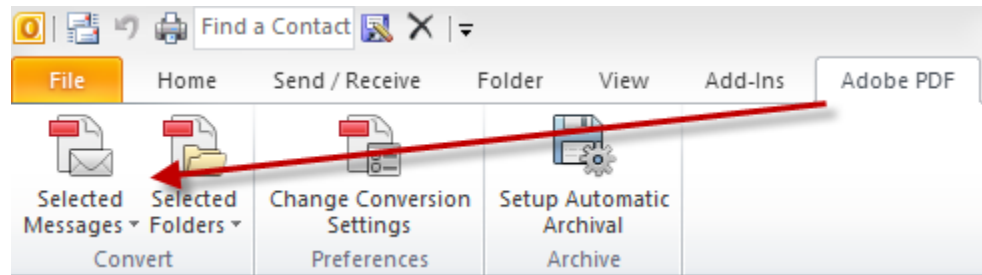


     **a.**     **Acrobat - Creating PDFs from Individual Emails or Entire Folders:** Simply select individual emails (Ctrl + left click) or select entire folders; then click Convert Selected Messages or Convert Selected Folders. This will create a single PDF which contains all of the emails you've selected *and all of the attachments thereto*.

     **b.**     **Acrobat - Adding Subsequent Emails to Existing PDFs:** If you receive additional emails which need to be added to an existing PDF archive, simply choose Append to Existing Adobe PDF.
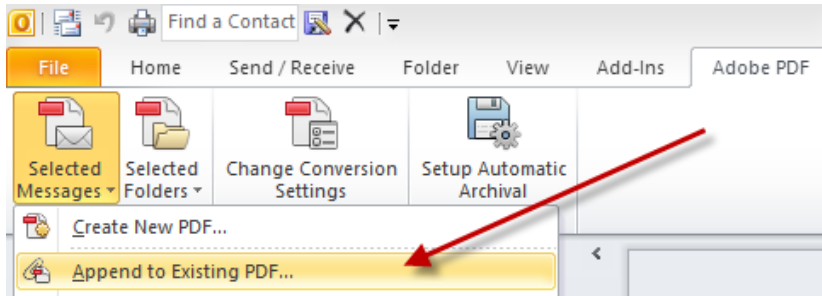
**c. Acrobat - Automatic Archival:** As you can see from the screen shot, you can also setup folders to automatically archive themselves. This would be particularly useful if you have setup Outlook rules to automatically sort your email into specific folders and then use Acrobat to automatically archive it.
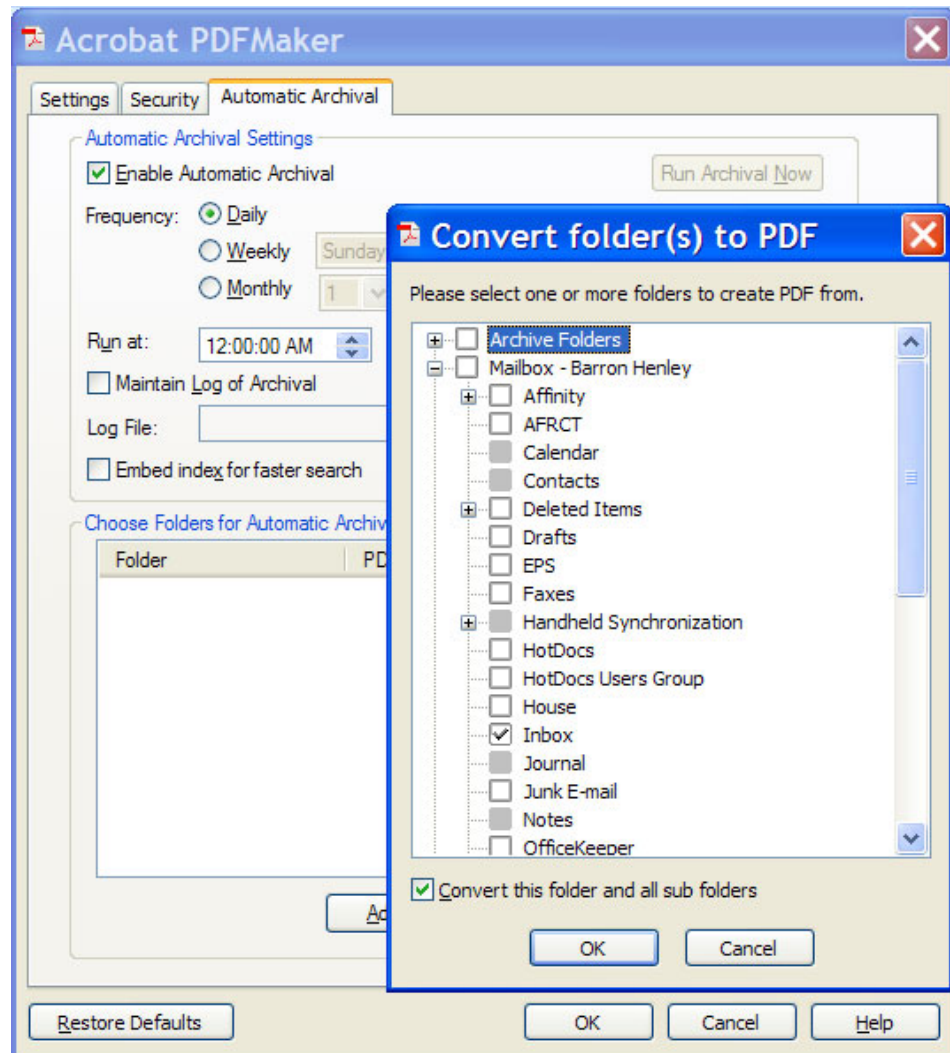


**d. Saving PDFs without Acrobat:** If you don't have Acrobat, you can still save email as PDFs. You're not going to get the slick Outlook

integration buttons and menus, but you can certainly open an email and create a PDF from it using any PDF creator program, several of which are free. For example, I would recommend either of the following free PDF makers.

- PDF995 - free - www.pdf995.com

- PDFCreator - free - http://sourceforge.net/projects/pdfcreator

**G. Email Storage Tips:**

1. **Store Email with Other Related Files:** Store the email in the same location as other electronic files related to any particular matter. Any system that requires you to save email separately from other electronic files related to a matter is inadequate.

2. **Delete or Archive Email Once Stored:** After an email is stored into a folder or a document management system, delete or archive it. Keep Outlook as clean as possible.

3. **Always Separately Save Attached Documents:** Outlook is NOT a document management system and should not be used as a document repository. Documents attached to Outlook emails are actually stored in a temporary folder structure that is incredibly convoluted and is normally hidden.

4. **Stop Printing Email:** If you've saved email digitally, then they're easily searchable and printing them to throw in paper files only makes your paper files fatter, harder to manage and harder to search.

**H. Benefits of Storing Email Outside of Outlook:**

1. **No Worry About Email Storage Limitations:** If you save email as separate files or in other programs, then you can free up mailbox space in Outlook and Exchange Server. As such, the IT folks will stop complaining that you're overloading the Exchange Server and your computer will operate faster.

2. **Everyone Else Can Find Them Too:** Once saved as separate files, others in your office will be able to find these important client communications. You're on your way to building a complete digital file.

3. **Searchable Like All Other Documents:** If you're saving into a document management system, then the content of all email stored therein is searchable. If the email is stored as separate files (PDFs, MSG files), then there are free or very inexpensive search programs that can help you find any of them by the words contained inside them.

# VII. OTHER OUTLOOK TIPS AND TRICKS

A. **Create Contacts from Email:** Drag and drop an email to the Contacts button and Outlook will create a new contact card for that email sender.

B. **Right-Click Email for All Possible Options:** Also known as alternate clicking, this feature will present very handy functions such as Open, Reply, Print, Forward, etc.
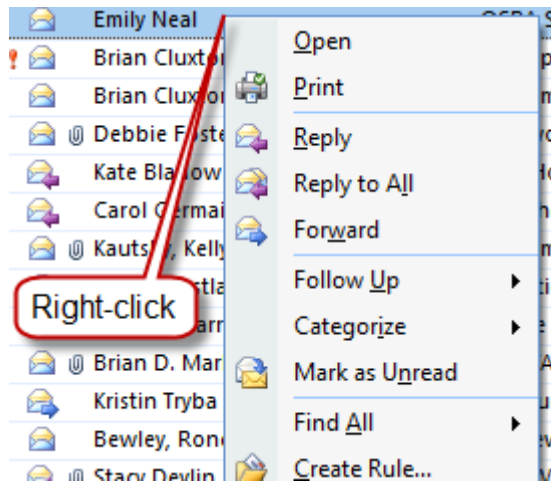


C. **Out of Office Assistant:** If you're going to be out of the office, this is a way to automatically notify people who send you email. To turn on this feature, click **File** > **Automatic Replies**.
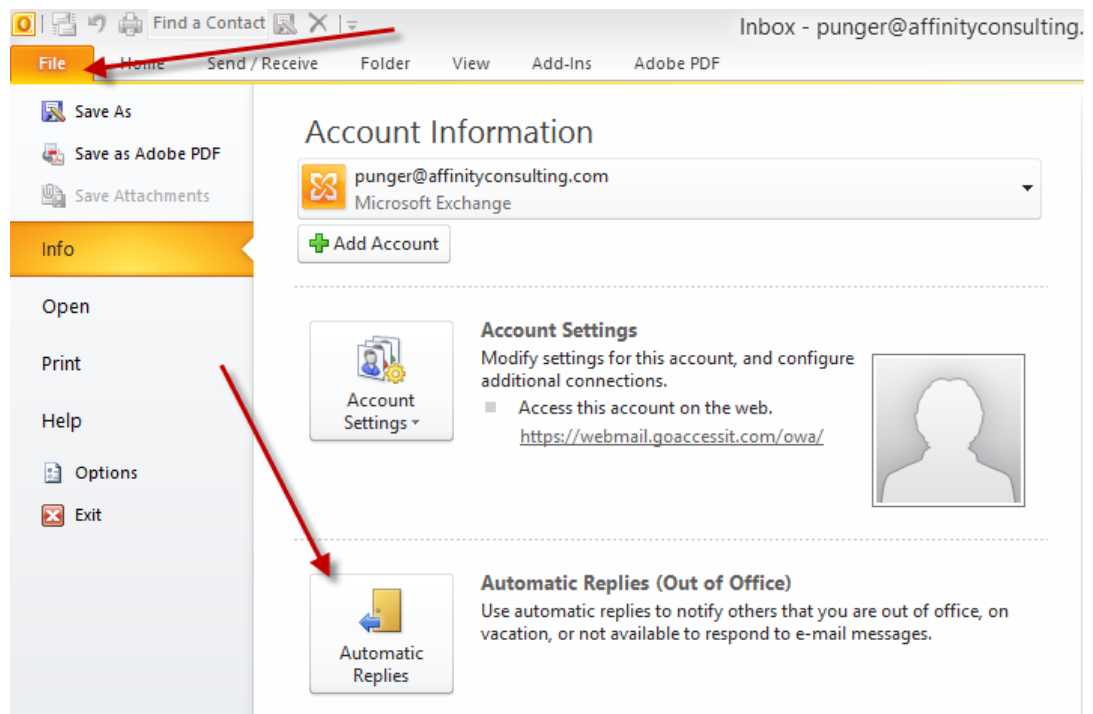
**D.     Saving Attachments to Email:**

**1.     One At A Time:** Open the email, right click the attachment and choose Save As.

**2.     In Bulk:**

- Outlook 2010/2013 – File button ➔ Save Attachments
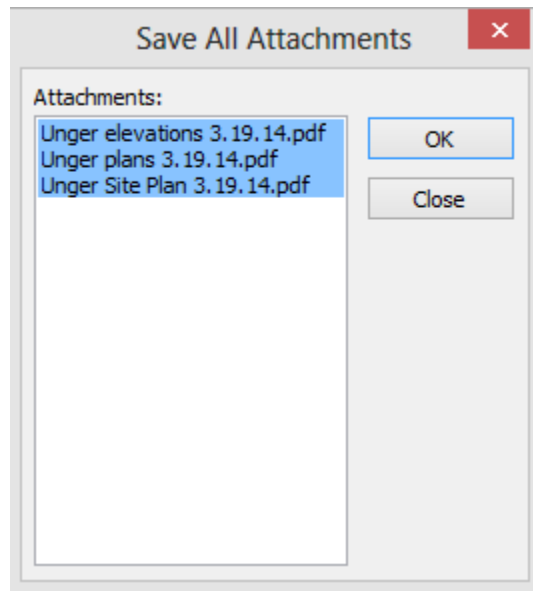


**E.     Set up your Signature Block:**

In Outlook, click the File menu ➔ Options button ➔ Mail tab (left side) ➔ Signatures button.
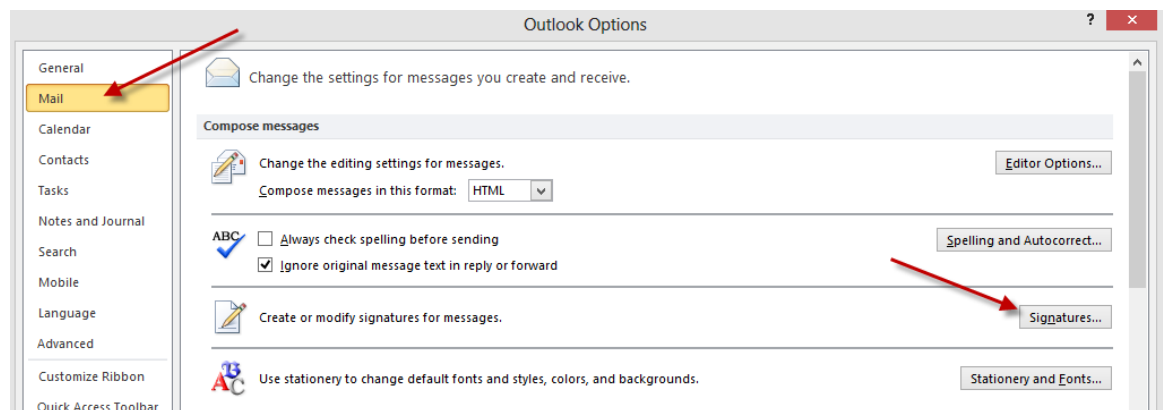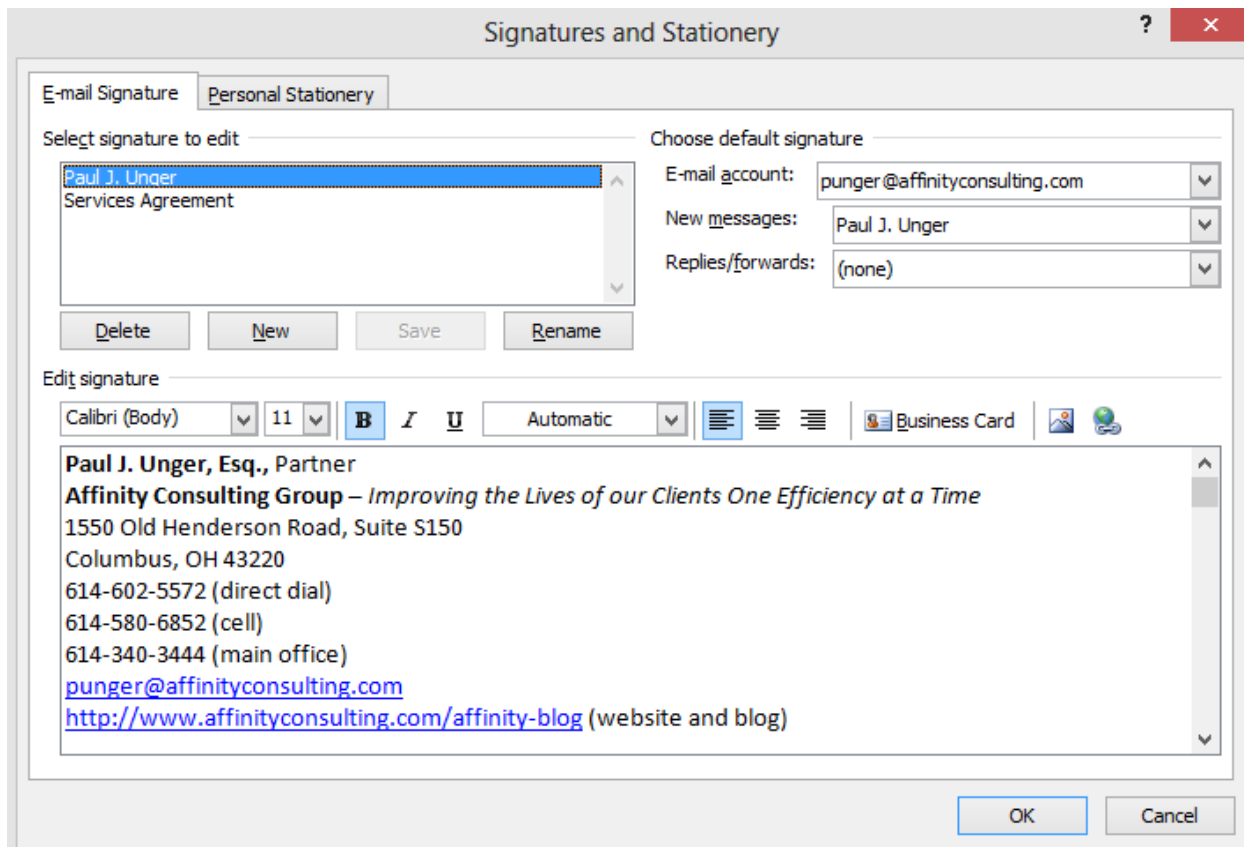
## F. Distribution Lists in Outlook:

If you routinely send email to a group of people, you can create a distribution list or contact group which will make it much easier. For example, I have a Contact Group called Affinity which automatically sends the email to 5 other people. All I have to type in the TO box is Affinity. Go to your Contacts in Outlook ➔ New Contact Group button (Home ribbon) ➔ name the group and add the appropriate email addresses.
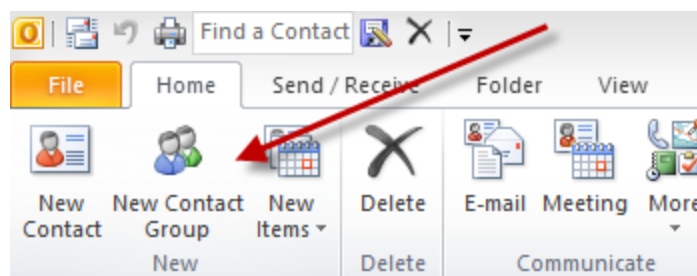


## G. Find Contacts Super Fast:

For the Quick Contact Search, just hit the F11 key and type in a first or last name.

## H. Edit The Auto-Complete List:

If you send an email to a person one time, then Outlook will remember their email address the next time you start typing anything that begins with the first letters of that person's email address. This has resulted in lots of email being sent to the wrong person. Outlook auto-completes an email address and it's the wrong one. In Outlook 2007, if you want to get rid of that person from auto complete you only sent one email to, start typing a name in the TO box of a new email. When the list appears, use your **arrow keys** to highlight the one you want to delete, then hit your delete key.
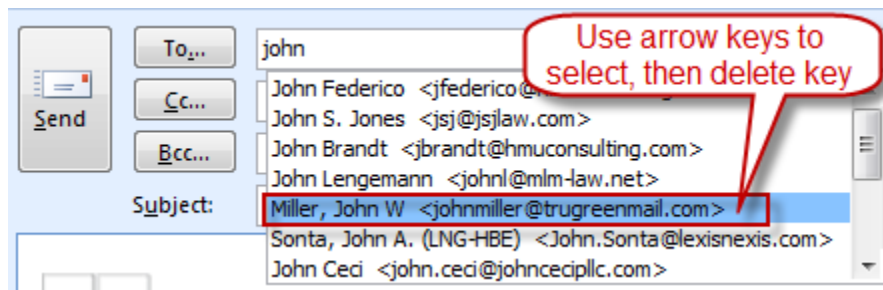


They've made this process easier in Outlook 2010 and 2013. Just start typing a name and when the auto-complete list of names appears, you can hover over the one you want to remove with your mouse and click the X that appears on the right side of each name:
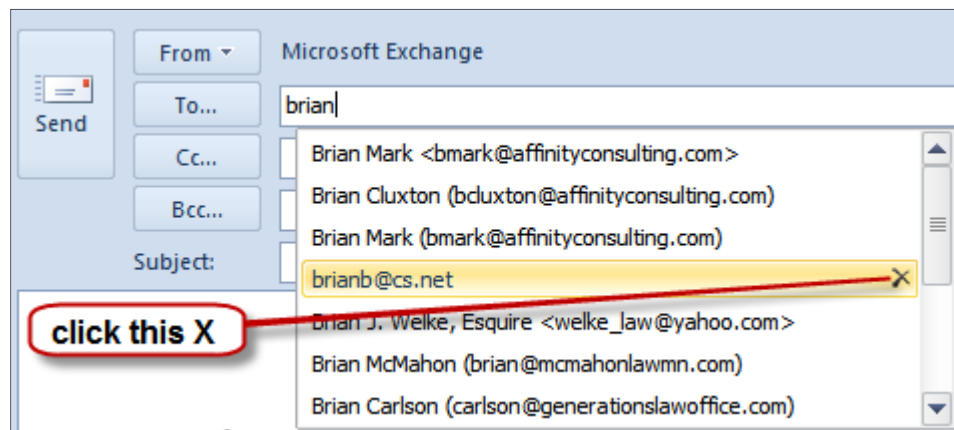


I.      **Mailbox Cleanup:**

From the File menu ➔ Info tab (left side) ➔ Cleanup Tools button.
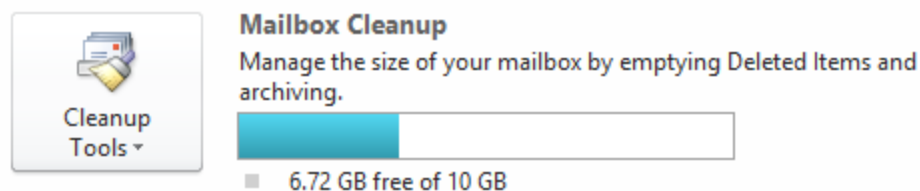
See below for all of the options it provides:
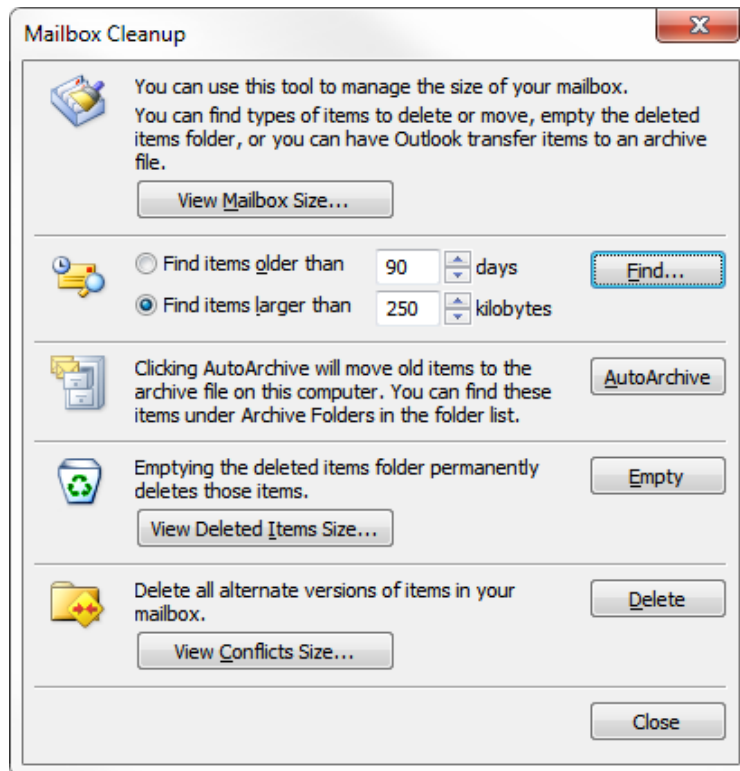
**J.      Advanced Search Capability:**

This feature gives you a tremendous number of options for searching through Outlook.  Simply hit **Ctrl + Shift + F**.
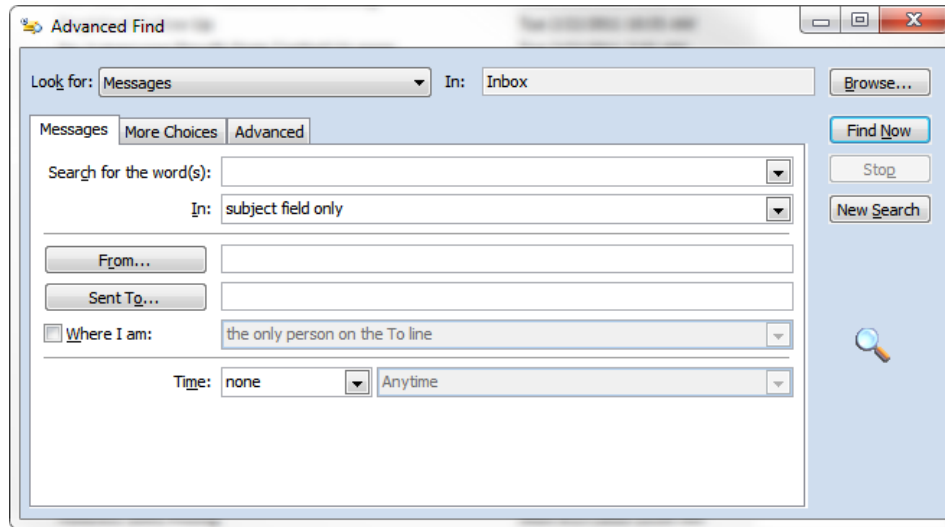


**K.      Email Quick Search:**

At the top of each mail folder, you'll see a box like the one below:
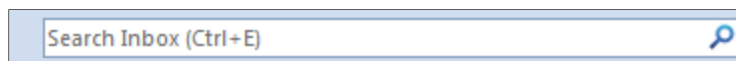


This will search for words you type in the email address or body of any email contained in that folder and it's *very* fast.

**L.      Junk Mail Settings:**

Click on Mail ➔ Junk button in the Delete group of the Home ribbon ➔ Junk Email Options.
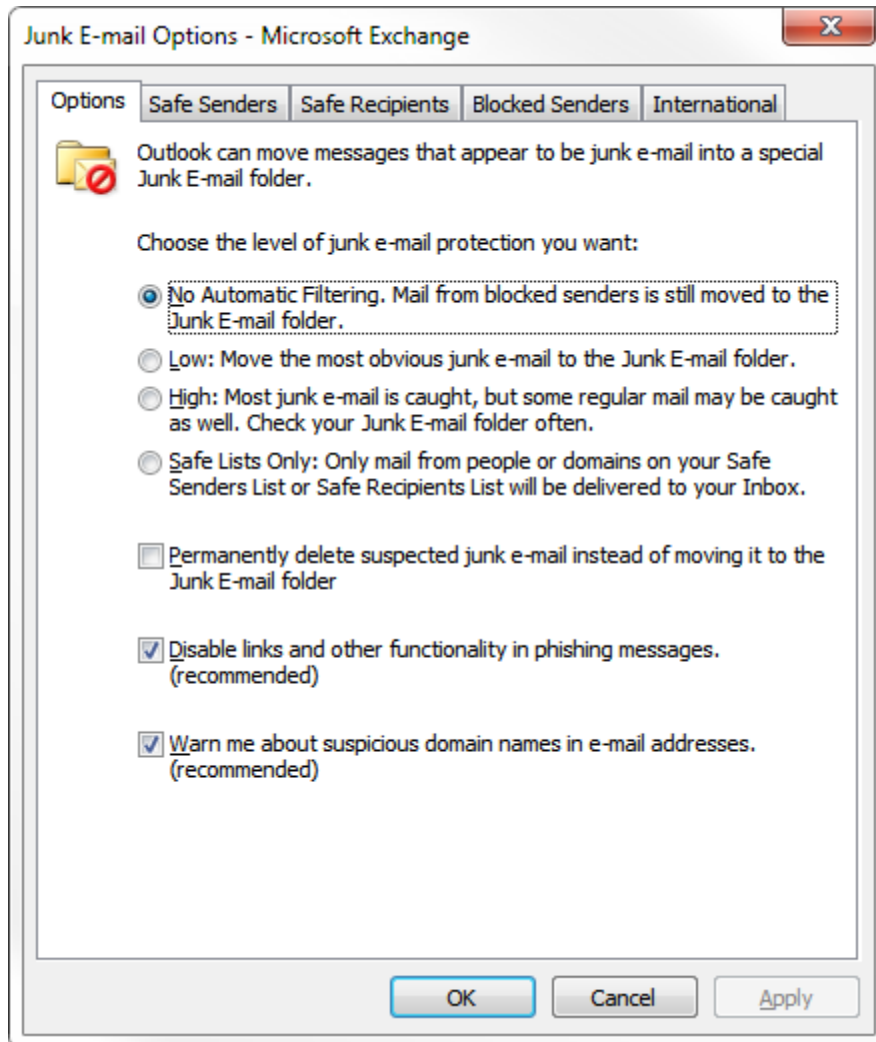
**M.** **Block Senders:**

The easiest way to do this is to right-click an email from a sender you want to block in the future. Choose Junk ➜ Block Sender.

## VIII. GENERAL EMAIL TIPS AND NETIQUETTE:

A.  **Spelling and Grammar:** Use proper spelling and grammar.  Emails that have proper spelling and grammar are more professional and easier to read.  It will also reduce the risk of misunderstanding, which is quite common with email communication.

B.  **Always Include Contact Info:** Always include your contact information in your signature, even your replies.  It just saves everyone time.

C.  **When in a Hurry, be Extra Careful:** While we are on the road, it is really easy for us to skim an email and miss something that is very important.  Sometimes it is better to wait to reply until you have a moment to read the email carefully.  Failure to do so can end of costing a lot of people, including yourself, a lot of time, money and drama.

D.  **Don't Be Rude:** Remember there is a human being on the other end of the email.  It is easy to forget in this age of electronic communication.  It is pretty easy to be rude when you aren't looking at them in the face.

E.  **Never Send an Angry Email:** Never send an email if you are angry or frustrated.  Wait 10 minutes, an hour, or even overnight if necessary.  Better yet, many times it might be better to pick up the phone and have a live conversation.

F.  **Use a Subject Line:** Clearly describe the message contents in the Subject line.  A clear and concise description helps everyone organize their Inbox.

G.  **Don't Put the Whole Message In the Subject Line:** Contrary to some advice, do not start typing your message in the Subject line.  I know some have recommended this as a time-saver.  It can be, but it is also more difficult to organize and find email drafted in that manner.

H.  **Email Is Often Misinterpreted:** There are many studies which indicate that 50% or higher of emails are misinterpreted regarding tone.  The problem is illustrated by the following passage.

> "Don't work too hard," wrote a colleague in an e-mail today. Was she sincere or sarcastic? I think I know (sarcastic), but I'm probably wrong. According to recent research published in the Journal of Personality and Social Psychology, I've only a 50-50 chance of ascertaining the tone of any e-mail message. The study also shows that people think they've correctly interpreted the tone of e-mails they receive 90 percent of the time.  "That's how flame wars get started," says psychologist Nicholas Epley of the University of Chicago, who conducted the research with Justin Kruger of New York University. "People in our study were convinced they've

accurately understood the tone of an e-mail message when in fact their odds are no better than chance," says Epley.[2]

Therefore, it is imperative that email (and instant messages, for that matter) are carefully worded.  When appropriate, you should also consider using emoticons in order to clearly convey tone - ;)

**I.**     **Beware of Forwarding Email:** Be cautious of forwarding emails.  Read the entire email first.  There may be derogatory statements from others deep in the string.

**J.**     **Be Cautious About Blind Copying:** You can't trust the recipient to not hit REPLY TO ALL!  You are probably better off sending the original and then forwarding a copy to desired party.

**K.**     **Avoid Large Attachments:** Be cognizant of sending large attachments to people.  Send links whenever possible using a client portal or a service like Dropbox, Box or Citrix ShareFile, when appropriate.

**L.**     **Only Copy People Who NEED To See It:** Don't CC people or Reply to All unless it is absolutely necessary.  You know how many unnecessary emails you receive a day.  Don't be part of the problem – be part of the solution.

**M.**     **Don't Forward Junk:** Don't forward jokes, spam or chain messages.

**N.**     **No Caps:** Don't type everything in CAPITALS.  In web-speak, this is equivalent to SHOUTING!  If someone does this to you, it probably means he/she thinks you are an idiot.

**O.**     **Don't Forward Virus Warnings:** 99.9% are hoaxes.  If you are worried about a virus rumor and want to check, go to www.snopes.com or www.hoax-slayer.com to verify if the warning is legitimate.


**IX.     <u>DOCUMENT AUTOMATION</u>**

Very few technologies save time like automating the drafting of documents. There are five or six primary methods professionals utilize when drafting documents.   They are broadly classified as follows:

**A.     Cut and Paste/Search and Replace ("Search and Replace"):** When creating new documents, most professionals simply start with the last document they created for a similar client and then modify it (cut-and-paste, search-and-replace) to suit the new client.  Although this is the most common approach, it has several significant disadvantages.  The first is a high margin for error and the second is a lack of speed.  The margin for error (and

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[2] *The Secret Cause of Flame Wars* by Stephen Leahy, Wired Magazine, February 13, 2006.   See http://tinyurl.com/2eu6un.

therefore malpractice risk) arises from the fact that Search and Replace is unstructured, relies on memory, assumes the word processor will "catch" all of the items in need of replacement and requires many steps. Memories fail, word processors don't catch everything and more steps create more mistakes and slower drafting. Transcribing voice recordings or hand written notes and cobbling together provisions from other documents makes the process slow. Finally, particularly with negotiated documents (leases, contracts, settlement agreements, etc.), the old document you may be starting with has typically been compromised during the prior negotiation process. So unless you can remember exactly what compromises were made, it is actually a terrible document to start with on a new transaction. As a result of the foregoing, Search and Replace is characterized by disorganization, mistakes, and inefficiency; and should be avoided whenever possible.

**B. Plain Forms,** Model Documents and Templates ("Plain Forms"): Some professionals have taken the time to create model documents or templates which contain as many language options as possible. In the alternative, some have broken all of their documents down into component parts and assemble their documents by cobbling together unique clauses, paragraphs or phrases they've previously organized, categorized and labeled. The language from either approach may contain blanks and/or written instructions to the user as to what should be entered into any particular blank and under what circumstances optional language should be included or excluded. This is significantly better than Search and Replace, but is still slow and contains a margin for error unacceptable to many.

**C. Forms Plus Word Processor Automation ("Forms Plus"):** Some professionals take the Plain Forms approach, then improve it by adding in automation features available in their word processor (typically WordPerfect or Word). This can mean utilizing merge functions, "prompt" fields, macros to expedite the insertion of optional language, and/or better use of Word's AutoText or Quick Parts features or WordPerfect's QuickWords feature. It's fairly easy to create templates and utilize the tools that Word or WordPerfect provides you for automating those templates. Automating the fill-in of names and the like is fairly easy. However, unless you're a programmer, gathering lists (beneficiaries, trustees, personal representatives, etc.), making language conditional and calculating things (such as he/she, him/her, verb conjugation, list punctuation) is extremely difficult, particularly in MS Word. This approach also assumes that you have a mastery of your word processor and know, for example, how to utilize automatic paragraph numbering, auto-calculating cross references, automatic tables of contents and other higher-end features. If these things aren't built into your templates, then you end up spending a lot of time wrestling with formatting issues and paragraph numbering which can significantly off-set any efficiencies you may have otherwise gained by utilizing word processor automation features. Having said all of that, you should be utilizing this approach at a minimum. It is superior to Search and Replace and Plain Forms in almost every respect. Further, the Search and Replace method is enhanced by the fact that properly created templates control list and other formatting making pasting a much more productive step.

**D. Plain Forms + Practice Management Software**: Practice Management software primarily aids professionals in organizing case information and items related to a case like documents, emails, and phone calls. A sometimes overlooked fact is that most case

management vendors offer integration options for your Word or WordPerfect templates. In practice management or contact management systems, you can store your templates within that system. When a document is created within a specific matter, the equivalent of merge codes grabs key information (client names, pleading captions – indeed nearly any of the case related database fields). Though not a true "document assembly" option for many this is a strong candidate as the next step.

**E.     Commercial Drafting Systems ("Commercial Systems"):** Having become frustrated with the inefficiency of Cut and Paste, or the amount of time necessary to develop and maintain the Plain Forms or Forms Plus approaches, some professionals simply buy or subscribe to a Commercial Systems.

Commercial Systems are widely divergent in terms of sophistication. For example, I have encountered estate planning drafting systems which enable the user to generate incredibly complex, customized documents which are valid in all 50 states. On the other end of the spectrum, I have seen systems which are nothing more than the most basic and simple forms with fill-in-the-blank technology. Sophisticated systems can cost as much as $5,000+ per year; and simple ones can be as inexpensive as a one-time $200 fee. Most Commercial Systems contemplate that you enter information about your client and in return, the system generates customized documents for that client. Some work in Word or WordPerfect; and some utilize their own custom-built word processor environment.

**F.     Forms Plus Document Assembly Software ("Document Assembly"):** Finally, some will take the Plain Forms approach and raise it to another level by utilizing third-party document assembly software in conjunction with their word processor. In effect, these individuals are creating their own commercial drafting systems. In fact, many of the Commercial Systems available are exactly that: a combination of Word and/or WordPerfect and a home-grown or commercially available document assembly program.

1.     What Is Document Assembly? Most document assembly programs integrate with your word processor and enable you to create sophisticated templates. Those templates typically generate an interview (series of questions) presented to the user. Upon answering the questions, a customized document is instantly generated. In addition to simply filling in blanks, document assembly programs support conditional logic (i.e., include the guardianship paragraph if the client has minor children or adult disabled children), infinite lists, and the ability to calculate text, numbers and dates.

The on-screen interview is quite powerful because the template designer can control everything about the sequence and content of the interview. With practice, you can reproduce your entire decision tree in the template and build in safe-guards that walk even novice users through the assembly process. An example of how an interview looks is shown below:
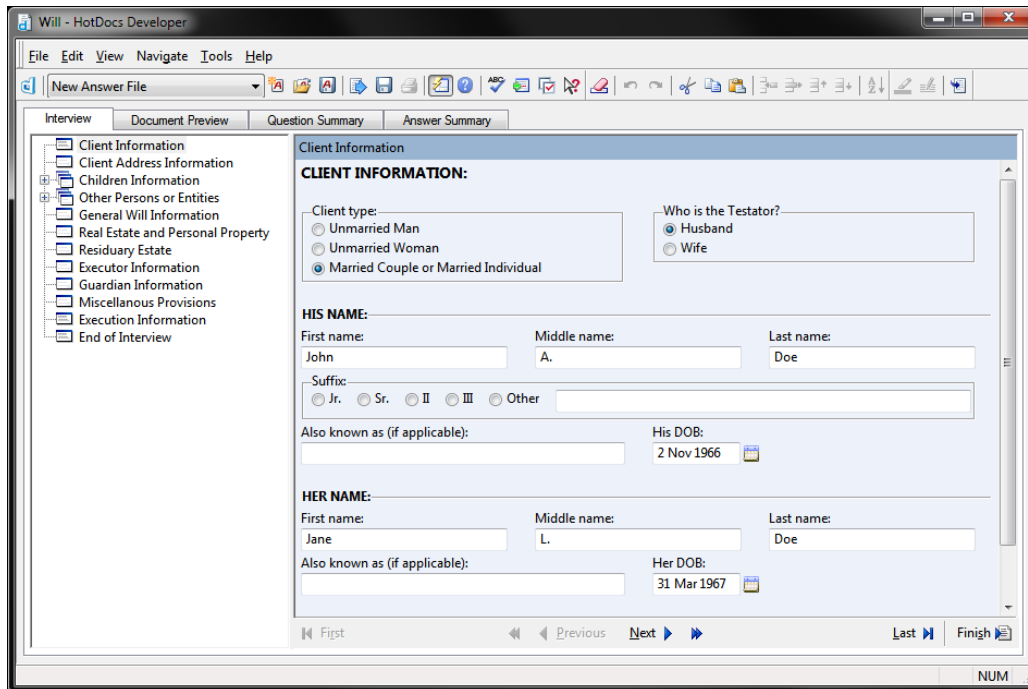
2.      How It Works - Big Picture: Using HotDocs as an example, the program allows users to replace changeable text with variables (i.e., «Testator Name», «Testator Street Address»), make the inclusion of text (words, sentences, paragraphs, etc.) conditional, gather (infinite) lists, and automatically calculate dates, text and numbers.

By "lists", I mean that the template can gather and process multiple records.  This is particularly important with legal documents because there are almost always parties and you never know how many there will be.  For example, in a deed, you have grantors and grantees.  There could be more than 1 of each.  In estate planning documents, there may be multiple children listed, executors/personal representatives, beneficiaries, guardians, or trustees.  All of those things are lists.  Good document assembly software lets you enter as many parties as necessary and based upon how many you enter, the template will produce correct language.  For example, depending upon what the user enters into a list of children in a Will, the document may say:

"Barron Henley has no children." or

"Barron Henley has one child, Ariel, age 16." or

"Barron Henley has two children, Ariel, age 16 and Alexis, age 14." or

"Barron Henley has three children, Ariel, age 16, Alexis, age 14 and Rylee, age 12."

The point is that whatever the user enters, the template produces the correct language and verb conjugation; and it doesn't matter how many there are.

With each new variable, you create a corresponding question (prompt) which is presented to the user during the assembly process.  Generating a new document is a simple matter of

answering the questions presented by the template. After the questions are answered, the completed document appears on the screen (in Word or WordPerfect), ready edit, save, print, etc.

After a document is assembled, HotDocs allows users to save the answers entered for one document so that they can be used to assemble other documents which use the same information. In this manner, users simultaneously decrease the margin for error while eliminating time wasted on redundant data entry. The document produced by HotDocs is a plain word processor document and can be edited and stored like any other document.

3.      Document Assembly Options: There are several available document automation applications and while each has its own unique way of handling the task, they all are very capable and able to achieve the objectives we discuss below. Each of them work with Word or WordPerfect or both. Some provide the ability to automate PDF forms. Because HotDocs continues to dominate the market and both of us are most familiar with it we refer to and show examples from HotDocs throughout this article but we could just as easily be referring to any of these applications. It is highly recommended that you explore the various options and decide for yourself which application best meets your needs in terms of availability, functionality and cost. Here are some options to explore:

• HotDocs - www.hotdocs.com

• ContractExpress - http://contractexpress.com/

• Rapidocs - www.rapidocs.com

• QShift - www.ixio.com

• Pathagoras - www.pathagoras.com

• Perfectus - www. perfectussolutions.com

• ActiveDocs - www.activedocs.com

• Exari - www.exari.com

• AmazingDocs - www.amazingdocs.com

**Date:** _____

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# GRATEFUL THOUGHTS ☺

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# NOTES

# FIGHT THE PAPER
## ELIMINATING PAPER IN THE LEGAL OFFICE

Presented by: Paul Unger

# FIGHT THE PAPER

## How to Eliminate Paper in the Legal Office

**Paul J. Unger, Esq.**
**Affinity Consulting Group**
[punger@affinityconsulting.com](mailto:punger@affinityconsulting.com)

# MEET THE AUTHORS

## PAUL UNGER, ESQ.

Paul J. Unger is a nationally recognized speaker, author and thought-leader in the legal technology industry. He is an attorney and founding principal of Affinity Consulting Group, a nationwide consulting company providing legal technology consulting, continuing legal education, and training. He is the author of dozens legal technology manuals and publications, including recent published books, *How to Effectively Manage your Workload – A Lawyer's Guide to Distraction, Time, Task & Email Management* (2019) and *PowerPoint in an Hour for Lawyers* (2014). He served as Chair of the ABA Legal Technology Resource Center (2012-13, 2013-14)( www.lawtechnology.org/), Chair of ABA TECHSHOW (2011)(www.techshow.com), and currently serves on the Executive Committee for ACLEA (The Association for Continuing Legal Education). Mr. Unger now spends most of his time doing CLE programs, professional development programs for law firms, and conducting technology and practice management assessments.

## BARRON HENLEY

Barron is an attorney who has over 20 years of experience in legal technology. After earning his B.S./B.A. (marketing and economics) and J.D. from The Ohio State University, Barron discovered his passion for helping lawyers fix problems within their practice. Today, Barron partners with our clients to make law firms and legal departments more efficient. Barron's breadth of knowledge enables him to dive into the details of a firm's operations. He is often the lead on Comprehensive Practice Analysis projects for clients that examine all aspects of making a firm more successful: technology, organizational design, process optimization and financial practices.

# FIGHT THE PAPER
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### 2   PORTABLE DOCUMENT FORMAT (PDF)

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# 1 THE PROBLEM WITH PAPER

## INTRODUCTION

To achieve effective time, document and email management, we have to "get organized." In order to be organized today, we absolutely must figure out how to manage digital information. According to one study, we receive via digital deliver (email, text, social media, on our phones, computers, etc.), the equivalent of 140 newspapers of information per day! This can be overwhelming, especially if you don't have a system in place to process that digital information.

In most offices today, only 1 attorney in 10 have eliminated 90+% of the paper file. In other words, only 1 in 10 have stopped maintaining a paper file and rely solely on the digital file. While better than nothing, that needs to be significantly better.

The good news is that the tools necessary to eliminate paper are available, easy to use and inexpensive. Of course, this hasn't always been the case. Back in the 90s, scanners were very expensive and relatively slow. Document management systems weren't very easy to use, and they were also expensive and made primarily for large organizations. Electronic storage space on servers was also expensive. Since that time, the tools have steadily improved as their costs have declined. Secure cloud storage is a highly competitive market, and therefore, there are many solutions available at a reasonable cost. As a result, the benefits of paper reduction now far outweigh the costs of implementing such a system.

## PROBLEMS WITH PAPER RELIANCE

There is still a heavy reliance on paper for many users in most environments. I realize that some people generally don't see paper reliance as a problem. Therefore, I want to explain why paper reliance represents an efficiency problem and needs to change.

**Paper Reliance Means Higher Operating Costs**: Most law offices are very interested in ways to save money. Operational efficiency means lower costs and improved profitability. Further, high efficiency and paper reliance are mutually exclusive. Creating paper files, maintaining them, updating them, moving and storing them all require non-billable labor. An organization's number one cost is probably payroll, so paper management factors into that. The paper, toner and office supplies (such as folders) are all expensive. Redweld expanding files are $10 for a 5 pack. Staples copy paper is $46 per case. Avery file labels are $26/pack (Staples); black toner for your copiers and printers is expensive. Further, a percentage of your offices are occupied by filing rooms and filing cabinets. So, you're technically paying rent every month for those files.

The bottom line is that all of these things add up to a large amount of money per year. These costs are a primary reason that courts, banks and almost every business that previously dealt with a lot of paper is now all electronic. Law offices are not exempt from this economic reality.

**More Paper Means Limited Mobility**: Transporting bulky paper files is difficult and sometimes impossible (depending upon the number one needs). As a result, lawyers often feel tethered to the office because they can't easily take the paper files with them if they need to work remotely.

**Too Easy to Lose Something or Drop a Ball**: If a lawyer or paralegal has stacks of files and paper all over his/her office, there is no way he/she knows what is at the bottom of those piles. Almost every person I've ever spoken

to who has a big mess of files in their office has claimed "I know where everything is." However, if I pick up a random stack and ask them to tell me everything that's in the pile, they have to admit that they don't know.

**Digital Records Are Being Forced on Lawyers**:  Much of what we do as lawyers, whether we like it or not, is already digital whether we like it or not.  ALL documents that we create start out as digital files.  They don't start in typewriters!  Why do we convert those to paper?  Many courts have gone to electronic filing, governmental entities we deal with are electronic, documents are traded between attorneys and clients electronically, and more and more evidence and discovery is electronic.  Lawyers who insist on operating with an analog/paper approach will have to keep printing more and more electronic documents in order to maintain a complete paper file. All professional service industries will eventually be electronic because that's the form all of the information they deal with will take.  Accountants, physicians, engineers, financial planners and architects are already there.  The only question for offices who provide legal services is whether they'll wait until the last minute and be reactive, or get out in front of it proactively.

**Overwhelming Volume of Communications to Manage**:  We machine gun one another with electronic communications resulting in many more pieces of correspondence to keep track of.  When I started practicing law 25 years ago, we received an occasional fax and no email.  Most correspondence came in the form of letters received via USPS or FedEx.  I might have received 3 to 5 pieces of mail a day related to cases I was working on.  Today, it's not uncommon for a lawyer to receive 150 emails a day related to their practice, some with attachments and most of which requiring an immediate response. Voice mails are often emailed as sound files and faxes are also often received as emailed PDF files.  As a result of this, the volume has exploded and paper-based systems break down as volume increases.

**Hunting for Files Is Expensive**: All offices who maintain paper case files spend non-billable, administrative time looking for paper files every month.  For example, files might be in your office (on the desk, under the desk, on the floor, in a cabinet or on a shelf), in a person's office, on a counter in a hallway, on a ledge somewhere in the office, in a filing cabinet, in the wrong filing cabinet, in someone's car, at someone's home or in someone's briefcase or bag.  That's a lot of places to look.  The cost associated with finding files can be very high.

**Paper Files Can Only Be in One Place at a Time**: Generally, only one person can be in possession of a paper file at a time. However, the same electronic files can be accessed by multiple people simultaneously.

**Paper Files Are Not Sharable**: If you want to share a paper file, then you have no choice but to incur the additional time and expense of making more paper copies.  This makes it difficult to collaborate with clients, experts, courts and co-counsel.

**Finding the Document Once You've Found the File**: Once you locate the paper file, now you begin the second search - finding the individual piece of paper within that file.  If the file is really big, it may take just as long to find a document within the file as it took to find the file in the first place.

**Paper Files Are Not Searchable**:  Obviously, you lose the search functionality an electronic file provides.

**The Paper File is not Complete and Neither is the Electronic File**:  Almost everyone I talk with indicates that email is not getting saved into the digital file and some of the work product is not getting saved.  Nearly everyone my polls indicate that they feel overwhelmed by email and there isn't an easy way to save incoming and outgoing emails into the digital case file or paper file.

# ROADMAP / ESSENTIAL ELEMENTS TO ACHIEVE PAPERLESS

The following are the elements required in every successful paper reduction initiative. The good news is that most organizations have already implemented many of these steps. You may just need to help getting over the finish line with changes in process and some simple training.

I. **Ensure You Have Solid I.T. Infrastructure, Redundant Backup Systems and Security**: You must have dependable servers, redundant data backup, and security systems and protocols in place if you are going to eliminate paper. If you implement a cloud-based system, much of this is simplified and solved as part of your monthly service fee. In fact, most reputable cloud providers have achieved and maintain security certifications that would be cost-prohibitive for most organizations. This is another reason most legal departments and law offices are migrating to cloud-based solutions. Within legal departments at corporations or colleges/universities, getting consistent I.T. assistance is tough because of the bureaucratic red tape that is involved and the high turnover of employees within the I.T. department. This makes cloud solutions even more attractive.

II. **Confidence in your I.T. Department**: Unless and until your users have confidence in the people running the system, they will continue to rely on the security of paper. It is their safety blanket.

III. **Acquire Desktop Scanners**: This is discussed below, but in short, your staff needs small, fast convenient desktop scanners so they can easily scan documents directly into the digital file right at their desk without having to get up and go stand in line to do their scanning.

IV. **Automatic OCR Engine**: All PDFs much be searchable, and that process needs to be automatic. You should not use up staff time to run this process. It is too expensive, and it will not get done a great deal of the time, resulting in people believing that documents are searchable, but they are not. See below for discussion on software solutions that can do this for you (Symphony OCR, ndOCR, Content Crawler, etc.).

V. **Document Management System (DMS)**: This can be a software solution, or a do-it-on-your-own process by saving documents in a central organized manner within a Windows folder structure. Most experts today agree that the with the volume of email and other digital content that we receive on a day to day basis, that we need software to assist us with document management.

VI. **Procedural Requirements:**

**Digitize All Incoming Paper**: Everything that comes in the door must be scanned (excluding advertisements) and then the paper goes in one of three places (preferably #1, below):

1. The shredder

2. Send back to client

3. A very thin paper file you may maintain because a statute, regulation or rule requires that you keep the blood-signed original.

**Scan Paper Work Product**: For example, lots of lawyers like to write on legal pads. It's perfectly fine to continue doing that as long as the resulting notes are scanned into the electronic file with everything else. Also, think about utilizing tablet-based note taking (I.e., iPad + Notability, Surface Pro + OneNote), and not even having to scan pages torn from legal pads.

**All Digital Case Documents must be Stored in DMS or Digital File:** Every PDF, Word document, Excel spreadsheet, PowerPoints, ... everything, must be saved to the DMS or digital file and

properly categorized based on document type (correspondence, pleadings, agreements, memos, notes, etc.)

**Important Case/Matter Email Must Be Stored in DMS or Digital File**:  All important email must be stored along with the rest of the electronic documents related to any particular matter.  Some important **copies** of emails can still be in Outlook, but copies must be stored in the DMS where the rest of the office can easily access them.  Note: One observation that I see people often make is that they to save every email into the digital file, and that just isn't necessary.  Saving just the important emails is fine.  When people aim for perfection or everything, it paralyzes them, not to mention that it results in time wasted and a ton of redundant emails.  Most of the time, with the exception of emails with attachments, the last email in an email conversation contains the entire historical thread.

**Workflow Review Method.**  There must be a process in place that insures that the intended recipients of the documents, and anyone else, (1) reviews the electronic information, and (2) tasks & deadlines get assigned based on that review.  Most offices will have a legal assistant (or a scanning clerk) do the following:

  a.  scan the document,

  b.  save it into the proper case/matter,

  c.  record & assign deadlines,

  d.  and then forward a **link** to the person that needs to review the document.

VII.  **Dual Monitors**: Dual monitors are absolutely needed for effective paper reduction.  I understand that there some may resistance to this idea, but the reality is that dual monitors have not only become standard issue for law offices and legal departments across the country, but this concept is also a key ingredient for helping to reduce reliance on paper.  See discussion below on Dual Monitors.

VIII.  **Portable Hardware/Mobility**:  If every lawyer is tethered to a desktop computer at the office, then the office loses out on a lot of the mobility benefits of being paper-reduced.  For lawyers who go to court, meet with clients or work outside of the office, there must be a means for them to take the electronic file with them.  Obviously, this is where notebook PCs, tablets or hybrids become very important.  Think about adding iPads for some lawyers who are road warriors or who try cases would be extremely valuable.

IX.  **Conference Room Technology**:  One reason that lawyers keep paper is to have the file available to them when they go to the conference room to meet with the client. To avoid this evil, you must have presentation technology in the conference room to review file information with the client on a large screen. Most firms today are using very large LED HD televisions/monitors and projecting wirelessly via their laptops.

X. **Collaborative Technology**: If you want to share an electronic file with someone outside of your office, then there must be a means for doing that without printing and shipping everything. DMS systems provide some of this functionality. It is baked into some systems like NetDocuments because they are cloud-based. If not baked in technology, then consider solutions like Citrix ShareFile.

XI. **Document Your Scanning Protocols**: Every firm needs a written "here's how we do it" manual. Process documentation allows new users to pick up the system quickly. Maybe more importantly, written policies make it much easier for the firm to gently remind users who have fallen off the wagon of what they previously agreed to do. We recommend Snagit (www.techsmith.com) to document those processes by using screen shots and recordings, as well as process mapping your steps for ALL your important processes. We recommend Lucid Chart (www.lucidchart.com) or Microsoft Visio for mapping. This will become one handout for your training.

XII. **Provide Training for all Lawyers and Staff**: This doesn't take long and isn't expensive, but it's critical to the success of any paper reduction initiative. Everyone needs to know how to play along. They also need to understand the "why". Without the right training, people do the craziest things (i.e., like print documents, sign it, scan and re-save as a PDF, and then send). Unless people know how to perform their core "paper" functions within a digital world, they will never give up the paper.

# 2 PORTABLE DOCUMENT FORMAT (PDF)

## WHY PDFS ARE SO IMPORTANT

**Worldwide Standard**: Every electronic court filing site in the country now requires the filing of PDFs. This is our new reality. PDFs have become the worldwide standard for the distribution of electronic documents. Since they are so common, it's extremely uncommon for the recipient of a PDF to be unable to open it.

**Protect the Document**: Adobe Acrobat, and similar tools like Nuance PowerPDF, Foxit, PDFDocs, etc., allow you to protect a document so that the text cannot be altered. You can also control who may access it, whether it can be printed or opened, etc.

**Collaboration**: Today, PDF tools make it easy to solicit feedback, comments and proposed changes to a PDF document. This makes PDFs ideal for negotiating the language of a documents and the like.

**Easy Creation**: You can create PDFs from any computer program that will print (such as Microsoft Word). PDFs can also be created with a scanner.

**Easy Combination**: PDFs can be compiled from many sources and any PDF can be combined with another.

**Forms**: PDF Tools allow for the creation of fillable forms and makes it easy to collect the data that is entered into them.

## PDF FILE TYPES

### PDF Files

PDF (Portable Document Format) is a file format that captures all elements of a printed document as an electronic image that you can view, navigate, print, or forward to someone else. PDF files are created using a PDF writer or print driver. To view and use the files, you need the free Adobe Reader (or other free or inexpensive PDF viewers), which you can easily download for free (www.adobe.com). Once you've downloaded the Reader, it will launch automatically whenever you want to look at a PDF file. PDF files have also become the de-facto standard method for distributing electronic forms on the Internet.

### PDF/A?

PDF/A (archival PDF) is a type of PDF that is used for the long-term storage of documents. Standard PDF files rely on external information, such as font libraries, to be read, and this can pose problems for retrieval far in the future. PDF/A files, on the other hand, have all information embedded in the file and do not rely on external information. This is useful for archiving, as anyone with a PDF/A reader can view a PDF/A file without the need for appropriate external information. The drawback to this is that because all information must be embedded in PDF/A files, they tend to be larger than regular PDF files. [1] For a more detailed description of PDF/A, see the description provided by the Sustainability of Digital Formats Planning for Library of Congress Collections here:

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[1] What Is PDF/A? See https://en.wikipedia.org/wiki/PDF/A

http://tinyurl.com/4wfwazy. PDF/A matters to law firms because many of the electronic case filing systems require PDF/A or may require it in the future.

## Image Only PDFs

This type of PDF is visually an exact replica of the original document (whether the original document was electronic or paper-based), but it contains no text which could be searched by Acrobat or any other program. This also means that you cannot copy and paste text from the document. This is usually the type of PDF that you get when you scan a document using a copier, scanner or multifunction machine.

## Searchable PDFs

This type of PDF is also an exact replica of the original document, but it also contains a hidden layer of text so that you can search for any word on any page. PDFs created from other computer programs electronically are searchable by default. In other words, if I create a PDF from a Word or WordPerfect document, an Excel workbook or an email, they are always searchable. As mentioned above, PDFs created by scanning can be, but are not always searchable. The software you're using to scan will determine whether you can create searchable PDFs. So that you can easily find the PDF documents you're looking for, you want to use searchable PDFs. See below "Searching" for a discussion on programs that will automatically make image-only PDFs text-searchable.

## PDF PROGRAM OPTIONS FOR LAWYERS

There are a number of PDF programs on the market today. Here are my top recommendations that you should evaluate:

1. **Adobe Acrobat Pro DC**: There are two flavors here: Acrobat DC Pro "with services" which you can only rent; and Acrobat DC Pro desktop which you can buy. You can rent DC Pro with Services for $179.88/year or $24.99/month; and you can buy DC Pro Desktop for $449. Only Pro is available for the Mac.

2. **Adobe Acrobat Standard DC**: There are two flavors here: Acrobat DC Standard "with services" which you can only rent; and Acrobat DC Sandard desktop which you can buy. You can rent DC Standard with Services for $155.88/year or $22.99/month; and you can buy DC Standard Desktop for $299. Standard is not available for the Mac.

3. **Nuance Power PDF Advanced**: Matches features of Acrobat Professional for only $149.99. This has quickly become one of the best alternatives to Acrobat.

4. **Nuance Power PDF Standard**: Matches features of Acrobat Standard for only $99.99.

5. **Foxit PhantomPDF for Business:** Very similar to Acrobat Pro for $129.

6. **Foxit PhantomPDF Standard:** Strong match with Acrobat Standard for $89.

7. **pdfDocs Pro by DocsCorp:** Very strong feature match with Acrobat Professional and recently completely revamped. A 12 month subscription is the only way to buy it and it's $107 annually.

8. **Nitro Pro:** Matches the features of Acrobat Professional. They offer a Nitro Pro+ which is rental only for $7.99/month ($95.88 paid annually - no option to pay monthly) and Nitro Pro (desktop) which is $159.99.

# 3 SCANNING

## LARGE CENTRAL SCANNERS VS. DESKTOP SCANNERS

In most offices, it is a mistake to solely rely on large central printer/copier/scanners in the copy room. We call this centralized scanning. It results in a back log of scanning because it is an inefficient way to scan most documents. Large central scanners are fine for large documents because of their speed, but they are terrible for most documents (1 – 30 pages).

It takes on average 3-5 minutes to scan a 10-page document on a large scanner from start to final saving location, versus 45-60 seconds on a desktop scanner.

Today we are scanning less and less because so much is coming into our offices via email (or download) as PDFs. That said, we still receive quite a bit of paper, and until that stops, we will continue to need scanners. For most offices, we recommend desktop scanners for legal assistants, paralegals, and only those attorneys who express the desire to do some of their own scanning.

## ESSENTIAL FEATURES OF A DESKTOP SCANNER

- Must have an automatic document feeder which holds 25 pages or more;
- You don't need a flatbed scanner because you have your multi-function copier/scanner, which has a flatbed for the rarer situation that you have a bound book or magazine.
- It must be fairly quiet (users should be able to conduct phone conversations without yelling over the scanner);
- We recommend a USB 2.0 or 3.0 connection to your computer;
- It must be able to scan black & white, gray-scale and color;
- It must be able to scan legal and letter sized documents; and
- It must be fairly fast (recommend 20 – 35 ppm).

# RECOMMENDED DESKTOP SCANNERS

**Fujitsu ScanSnap ix1500.** The ScanSnap scanner is small, fast (30 ppm single sided, 60 ppm double-sided), comes with the full version of Nuance PowerPDF, and can create searchable PDFs natively. It also has a 50 sheet automatic document feeder and also includes ABBYY FineReader which will allow you to convert paper documents into documents you can edit in MS Word. It costs between $400 - $440 from a variety of vendors. It's world-class software scanning interface is incredibly user-friendly. Because it is so easy, fast & reliable, this scanner (and it's predecessor, the ix-500) has made this scanner the most widely used desktop scanner in North America.



**Epson ES-400.** This is a TWAIN-compliant scanner that is also small and very fast (30 ppm single sides, 60 ppm double-sided). Because it is TWAIN-compliant, it can natively integrate with many programs, but the software for the end-user is not as easy to use as the Fujitsu ScanSnap Scan Manager software. I generally recommend the Fujitsu ScanSnap (above), but when TWAIN-compliancy is required, I recommend this scanner.

If TWAIN-compliancy is a requirement, and you are looking for a scanner with a higher duty cycle (example: the need to regularly scan over 1000 pages a day), then I recommend looking at these two models:

**Fujitsu fi-7160 Sheet-Fed Scanner**: This scanner is TWAIN-compliant and scans up to 60 ppm/120 ppm duplex black and white or grayscale. That is very fast for a desktop scanner. It has a 80-page Automatic Document Feeder (ADF) with enhanced hard and embossed card scanning (Example: credit or healthcare cards). This scanner usually retails for $850.

**Fujitsu fi-7180 Sheet-Fed Scanner**: Up to 80 ppm/160 ppm duplex black and white or grayscale. 80-page Automatic Document Feeder (ADF) with enhanced hard and embossed card scanning (Example: credit or healthcare cards). This scanner usually retails for $1,500.

# 4 DUAL MONITORS

## DUAL MONITORS INCREASE PRODUCTIVITY & REDUCE PAPER

Dual monitors are absolutely needed for effective paper reduction. I understand that there some may resistance to this idea, but the reality is that dual monitors have not only become standard issue for law offices and legal departments across the country, but this concept is also a key ingredient for helping to reduce reliance on paper. Having 2 monitors simply allows you to spread out and see two things at once (like research and the document you're drafting based upon that research). Of course, it also eliminates a lot of the minimizing and maximizing of applications when you're working with two programs simultaneously. Overall, it's a big efficiency gain and I doubt you'll ever find someone with dual monitors who would ever consider going back to just one monitor. Monitors that rotate to portrait view has also turned out to be valuable to some to help review documents on the computer rather than hard copy. Many lawyers print documents in order to review them because they find it difficult to review documents on a computer screen. This difficulty typically arises out of the fact that when viewing a document on a monitor, one can only see a few paragraphs of each page because the monitor is landscape (wide) and the document is portrait (tall). To remedy this problem, we recommend buying monitors that rotate to portrait (see screen shot below). Monitors with this capability usually only cost a few dollars more than those without it and it is completely worth the extra money. As you can see below, a standard 22" monitor rotated to portrait not only allows a user to see an entire page of text at once, but it makes it nearly twice as big as it would appear if you printed it on 8.5 x 11" paper.
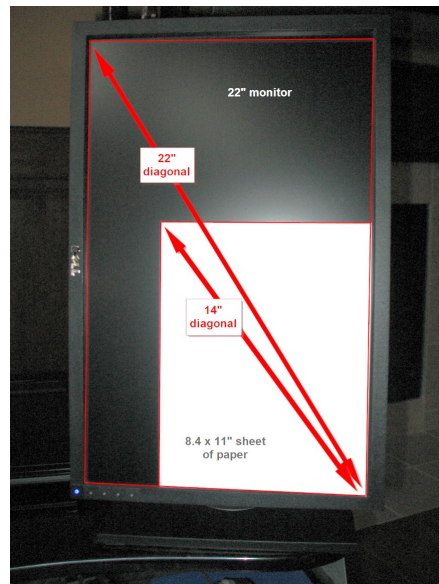


My recommendation is something like a Dell Professional 27" monitor (part number P2717H) which is $258 on amazon.com (http://www.dell.com/ed/business/p/dell-p2717h-monitor/pd). These monitors are beautiful, bright, and I guarantee will increase productivity.

# 5     IPADS/TABLETS

## IPADS/TABLETS HAVE REVOLUTIONIZED PAPER REDUCTION

One of the primary reasons that lawyers hang on to the paper file is because they don't have an effective way to bring the case/matter information with them when they go visit a client or go to court. Simply put, the iPad (and now other tablets) solve this problem 9 times out of 10.

In the 8-9 years since Apple released the iPad, it quickly established itself as a very useful tool for lawyers, and one of the biggest innovations in legal technology to come along in some time. iPads (or tablets, generally) are instrumental if a lawyer wants to take "the file" out of the office without taking or maintaining a paper file. I believe the tablet or iPad was this missing tool in our "paperless movement", and the lack of it caused us to maintain a dual filing system (maintaining our electronic file and our paper file) for nearly 20 years. Now that we have tablets, there aren't many situations where we need the paper file. We can simply carry the case file with us on our iPad. In fact, you can carry thousands of banker's boxes on your iPad. Try carrying even one banker's box in one hand!

The iPad's design is ingenious. Its functionality is equally as nice and continues to improve as legal software developers create new and innovative apps for lawyers. Indeed, the iPad remains the tablet of choice for legal app developers, far outpacing Android and Windows tablets in the number of legal apps available. Two features of iPads and Android tablets that are so appealing are (1) it is instant "on" and connected to the internet, and (2) the size, sleekness and multi-touch screen makes it many times a better experience than handling paper.

If you carry around a legal pad and a lot of paper in a legal file or Redweld, the iPad can become your legal pad and digital folder. It is truly redefining the idea of the "paperless law office", allowing you to actually carry most of your office around with you, all in a very small, light device. For courtroom work, the iPad can be used to access exhibits, pleadings, legal research, depositions, and just about any document you might need in hearings or at trial.

The iPad has some drawbacks as a computing tool that make it unsuitable as a complete replacement for your desktop or laptop; however, I believe it is ideal for courtroom use and client meetings because it is so light and easy to hold and operate. It is very easy to understand and use, with little training required. In fact, if you already use an iPhone, as so many of you already do, you'll be able to start working with an iPad right away.

Among the often-cited negatives of the iPad are (1) that it has no USB port for plugging the tablet into other devices and (2) that the battery is not removable or replaceable. One of the reasons that the lack of a USB port is not troubling is that the iPad comes with Bluetooth capability, so keyboards, printers, and other devices can be connected wirelessly to the device. Also, a number of cloud providers (NetDocuments, Dropbox, Box, OneDrive and Tresorit, among others) make it easy for you to access all of your documents online, without needing to connect your iPad to anything.

The iPad Pro has a 12.9" screen. This is one of my favorite tablets. There are some compelling features that make it worthy of consideration (at least for some users, not all). In particular, with the Apple Pencil, notetaking/handwriting on this device is an incredible experience.

In my opinion, it is this ease of use that explains why iPads are rapidly catching on with lawyers. A laptop, netbook, or even the "traditional" convertible tablet PCs, which are useful at counsel table, cannot be carried

around the courtroom easily when the lawyer is standing at the podium or addressing the jury. We firmly believe the iPad is the preferred mobile device for litigators in particular, because the apps designed for use in the courtroom are very powerful, but also simple enough that they will not distract from actually trying a case.

Essentially, the iPad is just a little heavier than a paper legal pad and not nearly as heavy as the lightest netbook or laptop.

Tablets are now integrating themselves into the workflow of lawyers, irrespective of office size or practice area, and nowhere has this been more apparent than for litigators. Whether you need to take notes, mark and handle exhibits, or manage deposition transcripts, these little computers can supercharge your trial practice. But the iPad can make any lawyer more productive, regardless of practice.

I don't think every attorney needs a tablet. In short, I think those who do more courtroom work, litigation, and those who are very mobile. One could also use a laptop/tablet hybrid (like a Lenovo Yoga, a Dell 2-in-one, etc.), but in my experience, most lawyers prefer to have a tablet separate and apart from their laptop because (1) many times you want to do tablet functions (like handwritten note-taking) at the same time you look up information on your laptop (perhaps in Legal Server, as an example; and (2) sometimes you want to just grab the tablet and leave the laptop behind.

# 6 SEARCHING YOUR DOCUMENTS

## SEARCH PROGRAMS

One of the most common technology problems facing lawyers today is difficulty finding their documents and email. We are forced to "re-invent the wheel" because we cannot tap into the intellectual capital of our (and others') previous creations. We are constantly forced to do research over and over, and then re-write things from scratch, resulting in loss of productivity and sometimes inconsistent advice to clients.

Document management systems (DMS) solve this and many other document management problems, but a full blown DMS requires an investment of time and money. If a full robust document management solution (discussed below) is not in your budget at the moment, or just not needed right now, you would definitely benefit from a search engine or a search program in the interim. These programs crawl through entire folder structures and will create an index of every single word in every single text-searchable document going back to the beginning of time (late 80's when word processors were first utilized). It is important to note that the document must be text-based/text-searchable (see discussion below on OCR Tools).

## WINDOWS SEARCH ENGINES

**Copernic Desktop Search**: See www.copernic.com. There are three versions of Copernic, Home (FREE), Professional ($49.95) and Corporate ($59.95). Unless you're installing it in a very large firm, you only need the Professional version. You can try the free home version, but one of the limitations of the free version is that it does not search network drives. So unless you're keeping all of your files on the C:\ of the computer you're using (I certainly hope you're not doing this), the Home version will not help you very much. Copernic will search all of your files (Word, Excel, PowerPoint, PDF, HTML, WordPerfect, text and another 150 types of files). It will also search your Outlook email and any attachments to email.

**X1 Search Engine**: See https://www.x1.com/products/x1-search/. Very similar to Copernic, X1 will also creating an index that is searchable in seconds. X1 retails for $96.

**dtSearch**: See www.dtSearch.com - $199 - one of the most sophisticated and fast search engines I've ever seen. It provides the most search options and file types that it can recognize. If you need industrial strength search capability involving enormous numbers of documents, this is your program.

**Filehand**: See www.filehand.com - FREE. Instantly search for files on your computer, by content. See the extracts of the files you found, even for PDF files. Scroll through the extracts so you can quickly find the information you're looking for. Find the file you are looking for, even when many files match, because Filehand Search sorts the results by relevance. Do complex Boolean searches and searches by phrase. Use it all the time because it is so simple to use!

**Windows Instant Search** (Windows 7 and 10): The Windows operating system has a basic, but powerful ability to search all folders.

## APPLE/MAC SEARCH ENGINES

**Spotlight Search (Mac OSX)**: This is included with the Mac OSX operating system. For more information, see http://support.apple.com/kb/HT2531

**EasyFind**: If you are looking for something a little more robust than the Spotlight Search, EasyFind is one alternative. Free - see http://easyfind.findmysoft.com/mac/

**HoudahSpot**: $15 - see https://www.houdah.com/houdahSpot/download.html.

## OCR TOOLS

As discussed above, in order for a document to be searchable, it must be text based. MS-Word documents, Word Perfect documents, Excel Spreadsheets, PowerPoint files are all natively searchable because they are natively text-based. PDFs may <u>not</u> be IF they are generated from a scanner or copier. PDFs are searchable if they converted to PDF (using an add-in, driver, or printed from Word, Excel, or PowerPoint. If a PDF is generated from a scanner, then there is an extra step that must be taken in order for that image-only PDF to become text searchable. That step is called Optical Character Recognition (OCR). This is a process that takes a short amount of time. On average, a 1-10 page document will take 5-30 seconds to OCR. That number increases significantly as the number pages increases. Generally, this is not a function that you want to require staff to perform. It is not a good use of their time, <u>and</u> as a practical matter, it just doesn't get done a huge part of the time, resulting in a bunch of documents that people can't search!

Many computer users don't even know what OCR means and they just assume the search tool is broken because it is "not finding my documents, and I know it is there!" Many of these image-only PDFs come if from clients, or opposing counsel, or from a discovery production. Some come from your copier. As you may know, To address this problem, we strongly recommend a third-party back end OCR tool like SymphonyOCR or DocsCorp Content Crawler. These solutions will look at any PDF deposited in a document management system (for NetDocuments, Worldox and iManage), or a plain Windows folder structure and run the OCR function automatically. ndOCR is an add-on to NetDocuments that retails for about $3/user per month. These solutions allow you to quickly scan PDFs into the system without the time-consuming process of converting them to searchable PDFs at the time they're added. It also will OCR all your old or legacy PDFs that are currently in Windows folders and Legal Server. This may not sound like a huge issue, but it will save you and your office hundreds of hours per year. See http://symphonysuite.com. The cost of Symphony is roughly $45/user/year.

# 7 DOCUMENT MANAGEMENT SYSTEM

## DMS DEFINED

A Document Management System (DMS) is the combination of software/hardware tools which streamlines and automates the process of document & email management. Document management software has become so useful over the past 20 years, most organizations believe it is the true foundation for knowledge management and eliminating paper in the office.

Since DMSs only manage electronic documents, any paper documents must be converted (scanned) so that they can be managed by the DMS. In simple terms, your paper "Files" are just collections of paper documents related to a particular matter. Once all of that paper is in digital form, a DMS can organize it by matter just as your paper files are currently organized.

Legal document management software should have all the below **core functions**/features:

## EASY COMPLIANCE – INTEGRATION WITH MAJOR APPS

In order to be convenient to use, the DMS must integrate with Word, Acrobat (or pdfDocs, Nuance PowerPDF, Foxit, etc.), Excel and any other major application in which you save documents or files. For instance, when someone clicks the Save or Open button in Word, the DMS must intercept and ask the user to "profile" or save the document, or find the document within the DMS.
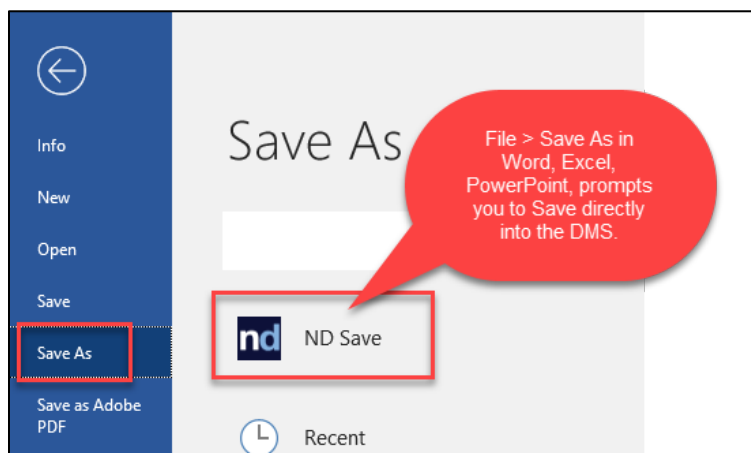


## EMAIL MANAGEMENT – INTEGRATION WITH OUTLOOK

Email management is extremely important since most people feel crushed by email. A DMS is a full email management system (among other things). With a DMS, all emails related to a particular matter can be easily saved along with the other matter-related documents. Right now, without a DMS, users are saving emails in Outlook subfolders that no one else has access to, or they are saving emails to Windows folders through a very inefficient tedious process. Saving emails must be an easy process! Important features include:

**One-click Saving**: People do this constantly, every day. The process can't be time consuming, tedious or have too many steps. A good DMS solution will have integration with Outlook by selecting or opening an email and then simply clicking on a toolbar button to move a copy of the email into the DMS, as seen here in a screenshot from the Worldox document management system:
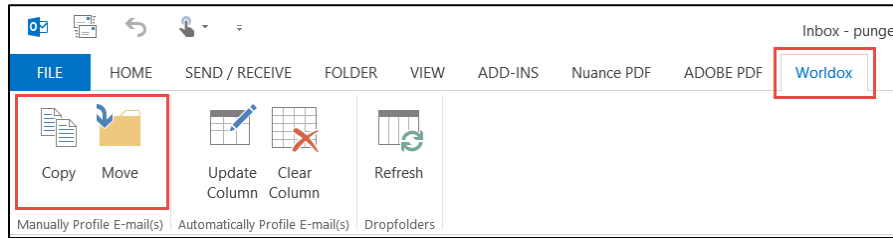


One selects an email and then hits with Copy to Worldox or Move to Worldox.

Here is a screenshot from the NetDocuments document management system:
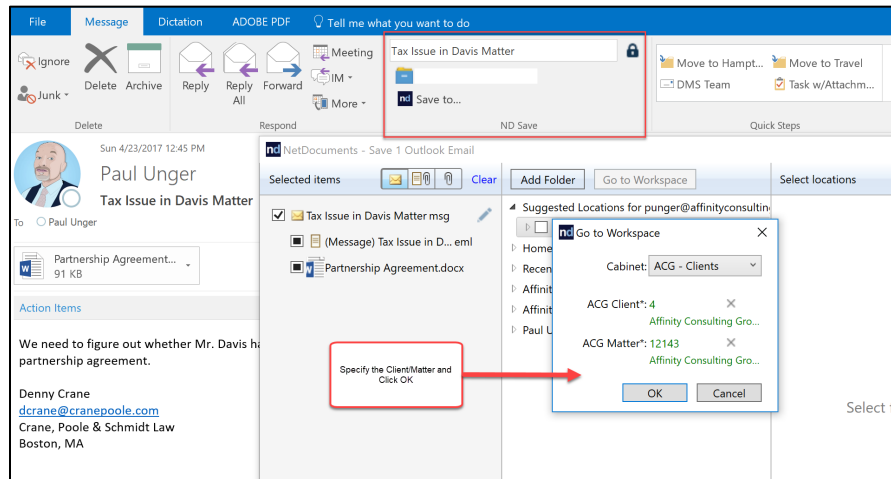


The user simply selects an email or multiple emails and using the ndSave function, can select the correct client/matter or area/matter.

**Ability to save emails with attachments** embedded in the native email format from within Outlook without "exporting" them or saving them somewhere else before they're moved into the DMS.

**Ability to save only attachments** easily into the DMS from a right-click on the email attachment and use the Save to the DMS Command as seen here with the NetDocuments integration with Outlook:
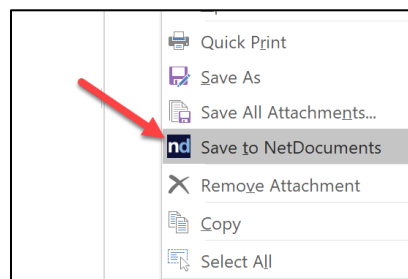
# SAVING EMAIL USING ARTIFICIAL INTELLIGENCE (AI)

The NetDocuments' DMS has launched a pretty amazing new feature that uses AI to help lawyers automate the saving of email, eliminating many clicks from the above process. The feature is called ndMail. It is an optional add-on module that enhances the email filing experience from Microsoft Outlook by drastically reducing the time and effort required to save email messages into the client/matter folder.

Core to the application is the predictive email filing component which uses machine learning to determine which matter each email message in your inbox should be filed against based on the sender, recipient, subject and content from the actual message.

As a user highlights an email message in Outlook, the integrated ndMail panel will display suggested matters that it has determined may be appropriate for that email. They are listed in order based on the its "confidence" of fit. The user can then make the decision to accept, override or ignore the suggested destinations:
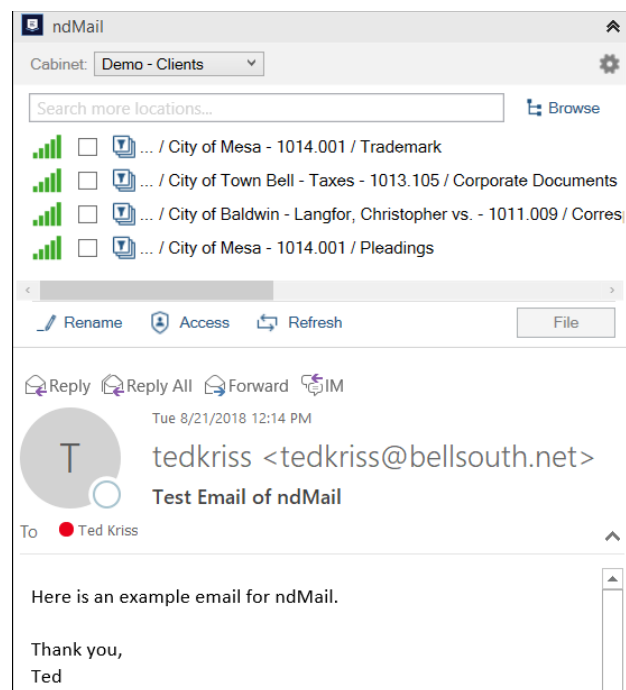


Most importantly, ndMail "learns" each time a user in your firm files an email with ndMail, which significantly increases the accuracy of suggested destinations over time across the entire firm.

ndMail also provides an email de-duplication service during the email saving process, as it reviews each message and instantly notifies the user if that email has already been saved into the system previously by anybody else at your firm.

## FULL TEXT AND BOOLEAN LOGIC SEARCHING

If you have a document management program (like Worldox, NetDocuments, iManage or OpenText), you do not need to invest in a separate search engine (like Copernic, X1, dtSearch). The search engine functionality is part of the program, and within legal DMS programs, they are extremely powerful. Full text searching gives users wide-open access to their documents by framing searches based on concepts rather than categories. Users can search by many criteria - words, combinations of words, phrases, words within proximity of each other, expressions, etc. Each document matching the search terms is returned as a "hit" and the integrated file viewer will highlight each occurrence of a search term in the returned documents. This is exactly like doing a Lexis or Westlaw-type search through your own documents. When evaluating DMSs, you want the ability to view the documents in a viewer without actually opening them, you want to be able to use Boolean logic terms (and, or, not, near, etc.), and you want the search terms highlighted in the document the system found. This is a screenshot from Worldox, who has one of the best and cleanest advanced search dialog boxes:
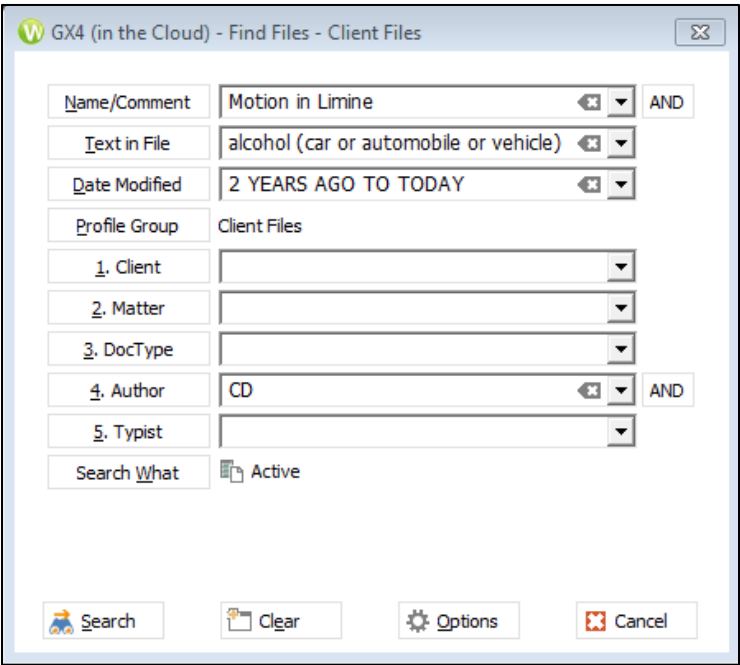


## SIMPLE GOOGLE-TYPE SEARCHING

It is important for less tech-savvy people to have the ability to do quick simple searches with a "Google-Type" single search field, as best seen here in NetDocuments:
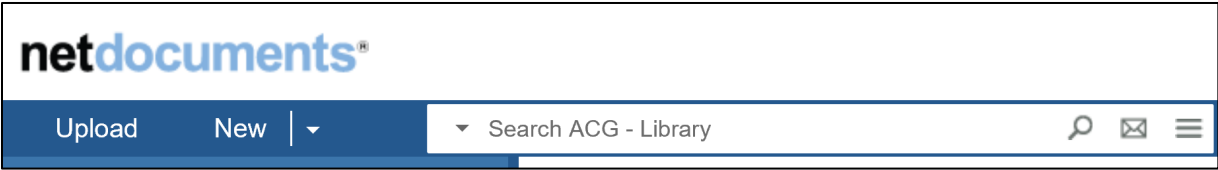
## METADATA SEARCHES

In the realm of document management, metadata is the critical additional information stored about the document (other than the file name).

Metadata includes, but is not limited to, information like:

- Name
- Comments
- User-defined "tags"
- Indexed full text
- Email From
- Email To
- Email Sent Date
- Doc ID
- Date Modified, Created, Accessed
- Cabinet
- Client
- Matter
- DocType
- Author
- Typist
- Date (actual date associated with the document)
- Date range

This search capability ensures continuity and a smooth transition when someone leaves or joins your office. For example, if someone unexpectedly (and suddenly) left your office, it would be pretty difficult to determine exactly what they were working on before they left. However, if a document management system were in use, it would be quite easy to find every single document or email that person touched in the last 90 days (for example). It's one thing to have a log or list of documents they were working on; it's quite another to actually be able to find those documents. Furthermore, the searches can be narrowed down considerably. For example, I could easily find every pleading (document type), containing the phrase "motion for summary judgment" (text in file), created by a particular employee (author), between 11/1/2008 and 11/1/2009 (date created range), for any matter having to do with the Jelson Electric, Inc. (client name). I imagine that it is presently impossible for anyone in your office to even contemplate a search like that

## OCR CAPABILITIES

As discussed above, the ability to OCR Image-Only PDFs to make them Text Searchable is critical. The DMS should be able to identify PDFs that are non-searchable and automatically OCR them to make them text searchable. This should happen on the back-end automatically, so users do not have to waste time running the OCR process on every PDF they scan or receive via email. Most DMS systems utilize add-on products like Symphony OCR or ndOCR to perform the OCR automatically.

## GIVE CLIENTS/EXTERNAL USERS SECURE ACCESS TO SOME DOCUMENTS

Systems like NetDocuments have collaboration tools natively built-in because they are designed using pure cloud architecture. In other words, you don't need to buy an add-on product like Citrix ShareFile in order to create a place to share documents with clients. This is a screenshot taken from NetDocuments, showing this feature, which they call Collaboration or Share Spaces:
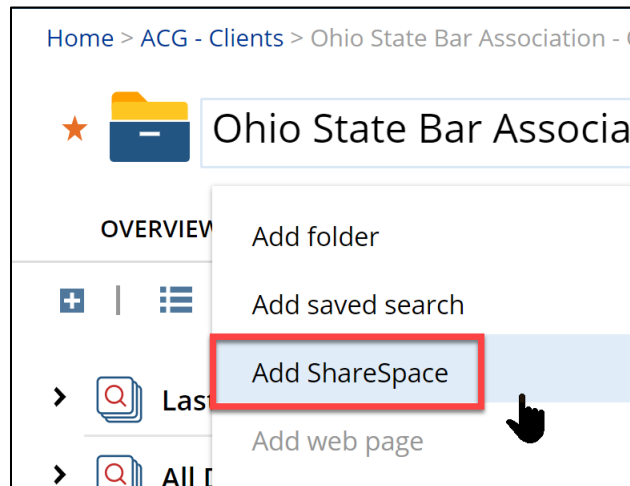


## NO ACCIDENTAL DRAG & DROPS

A frequent issue reported to us is the cry for help when a document folder goes missing. Those folders are often accidentally dropped into a different folder and the user has no idea what happened. This is impossible with a document management system. Moreover, if documents do get moved accidentally, the audit trail would accurately identify what happened, when it happened, and who did it.

## DELETING DOESN'T HAVE TO MEAN DELETED

The office can set up a rule where deleted documents go to a 'trash' holding place where they can be auto deleted after a certain number of days or kept until an administrator empties the trash.

## ORGANIZE A LIBRARY OR BRIEF BANK

A document management system can be incredibly helpful when it comes to categorizing and protecting forms, templates, precedents and organizing a brief bank by topic that is fully text searchable. Create a dedicated cabinet that is fully searchable to tap into your organization's knowledge base.

## ABILITY TO SAVE MOST ANY FILE TYPE

The DMS must be able to hold any type of file you've created in-house as well as any type of scanned document (PDF, TIF or JPG) which will typically represent the documents you're received from the outside. A search must turn up all relevant documents regardless of physical location, format, and source application. For example, we have seen plenty of copier-based applications which only hold documents you scan. It does little good to have scanned documents in one system and all of the documents you've created in-house in another system. The idea is to get everything related to a matter in the same system, including documents you've created in-house, documents you've scanned, faxes, hand-written notes, email and attachments to email.

## VERSION TRACKING/MANAGEMENT

The DMS must be able to keep multiple versions of every document. This becomes very important when a document is undergoing revision and is being passed back and forth between attorneys. Most DMSs will keep over 100 versions of every document along with a detailed audit trail noting who did what to the file and when. When the revised document is saved within the system, it will prompt the user with the option to save it as another version, as see here with Worldox:
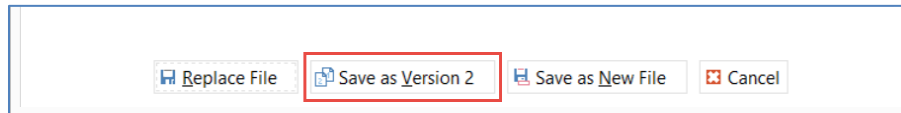
Once saved, whenever that document appears in a search result or list, the DMS groups all of the versions as one listing, and indicates that there are multiple versions available of that document, as seen here in a screenshot from NetDocuments:



If users want to see all versions of the document, they can right-click and select list versions and see a complete history:

## ABILITY TO COMPARE DOCUMENTS

Related to version tracking, users must also have the ability to compare different versions of a document or compare one document to another. In order to compare documents, some people use the compare features built into MS Word while others use 3rd party applications like CompareDocs or Workshare Professional (fka DeltaView). Since all of the documents being compared to one another will be stored in the DMS, the DMS must integrate with these functions in Word or 3rd party programs. Not all DMSs incorporate this functionality which is why this is an important question to ask up front.

## AUDIT TRAIL / DOCUMENT HISTORY

The DMS must be able to automatically audit all transactions related to a file saved within the system so it is easy to determine with files were first created, see everyone who touched it, and determine things like when files were copied, printed, emailed or deleted from the system.
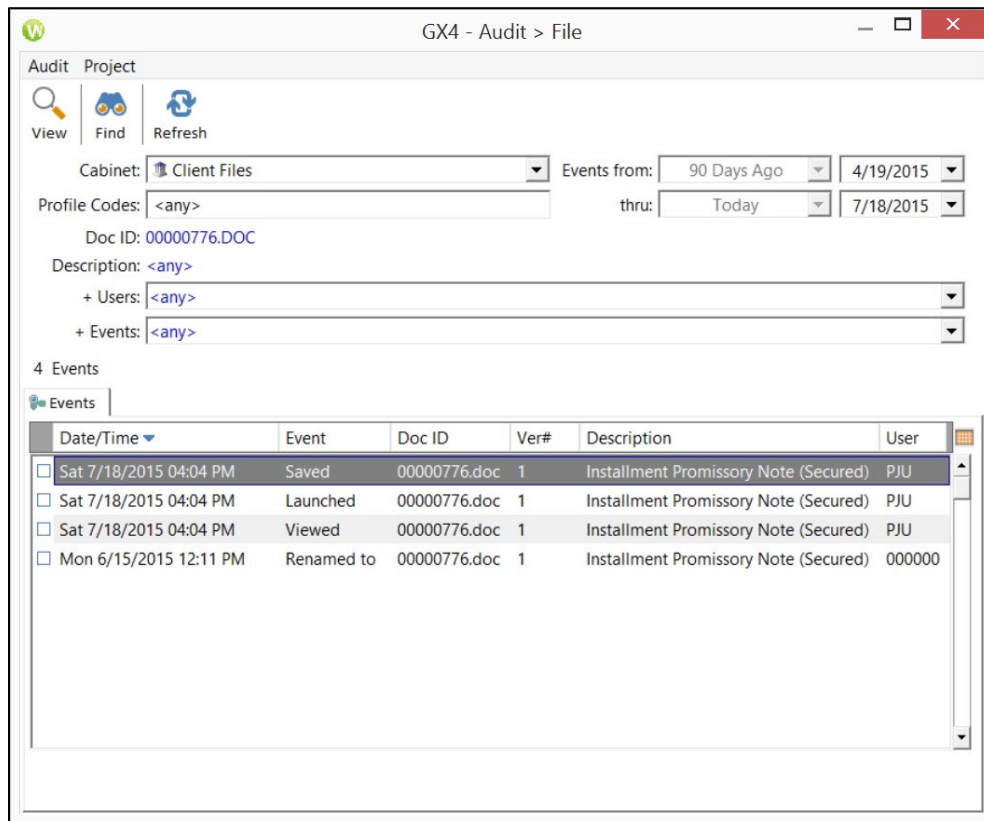
# FOLLOWING A DOCUMENT

If you want, you should be able to have the DMS system notify you if a document has been reviewed or edited.



# ARCHIVING

Archiving is a means to move dated or unused files off the main storage medium to secondary storage. The DMS ensures that users can still search for information in the archived files and that there is a ready means to restore it. Many DMSs will allow site administrators to set "triggers" in the document profiles that enable automated archiving. For example, it may be desirable to set internal memos to be archived automatically after say, 24 months.

# OFFLINE ACCESS

The DMS must be accessible when you're not in the office or if you lose connectivity ... at least the most recent documents that you have touches. You will need to have full access to those recent documents. This functionality is called "mirroring" or "caching".

# REMOTE ACCESS

It is critical that lawyers have access to the system via the web, from an iPhone, iPad or other mobile device. All major legal document management programs (Worldox, NetDocuments, iManage and OpenText) offer these solutions and this incredibly convenient access.

# SCANNING INTEGRATION

Scanned documents must be easily added to the DMS so that they are included in the document store and can be associated with matters, clients, and the like. All the major legal DMS programs have direct integration with the Fujitsu ix1500 desktop scanner. This is important because the ix1500 is the most popular desktop scanner in North America.

## CONSISTENCY

The system must ensure that documents are consistently labeled and stored.  This means that profile fields are drop-down lists and people don't have to manually type document types, client and matter identification numbers, etc.
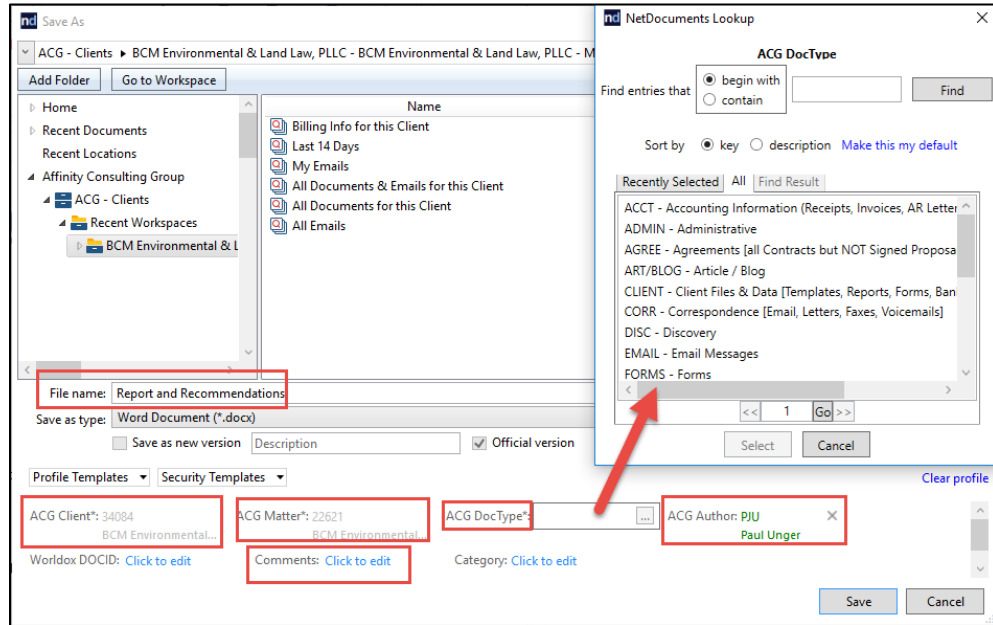


## LEGAL DMS MAIN PLAYERS

I've listed below the main players in the legal market, but there are many other options:

**NetDocuments**: See www.netdocuments.com. This is a pure cloud-based option and is therefore going to be less expensive up front than the on-premise options.  NetDocuments is easily the most mature cloud DMS platform on the market today.  NetDocuments is currently one of the most popular DMS for most firms, and is a great choice for firms of all sizes.

**Worldox**:  See www.worldox.com.  Worldox is also one of the most popular DMS options.  It can also accommodate larger environments, but NetDocuments, iManage and OpenText are probably better suited for very large environments (over 350 users). Worldox's core product is terrestrial (on-premises), but they do offer a hosted hybrid cloud solution.

**iManage**: See http://www.imanage.com.  iManage is an excellent program, but it tends to cater to large enterprises.  iManage's core product is terrestrial (on-premises), but they do offer a hosted hybrid cloud solution.

**OpenText** (formerly Hummingbird): See http://www.opentext.com. Like iManage, OpenText tends to cater to large enterprises also.  OpenText's core product is terrestrial (on-premises), but they do offer a hosted hybrid cloud solution.

# 8 DOCUMENT MANAGEMENT WITHOUT DM SOFTWARE (HOME-GROWN DMS)

From a productivity standpoint, an enormous amount of time is collectively wasted daily in law firms and legal departments searching for documents when documents are managed poorly. Unfortunately, in our experience, most organizations, no matter the size, have poor document management practices if they do not have document management software. It's simply too hard to police and monitor to make sure that people comply … ie. Saving documents in the central designated location and doing so in a consistent manner. As the firm size grows, so does the need and justification for a DMS. That said, sometimes there isn't money in the budget right now. So what can you do in the interim? What are the essential elements?

## CENTRAL FOLDERING THAT IS MATTER-CENTRIC

It is critical that documents are saved by **client/matter, or within a legal department by area/matter**, and <u>not</u> by user. Saving documents by user can create lots of problems, such as:

• Documents for one client being located in more than one folder.

• Revision conflicts.

• Losing things permanently if staff turns over. Turnover creates an administrative nightmare for everyone in managing those documents. Saving by user results in duplicate files and no one really knowing what is the authoritative version of a document or how matters were left.

Saving documents on a user's local hard drives is a big no-no as well. Those documents are not getting backed up! They need to be saved centrally on a file server or in the cloud, within <u>one matter folder</u>. You can create a logical directory layout, find documents easier, and it makes backing up your documents simpler. You can use Windows active directory security to limit access to folders based on users.

If S is your server drive where your documents are located, you may create something like:

• S:\Clients

• S:\Accounting

• S:\Marketing

• S:\Admin

• S:\Library

It would look something like this:
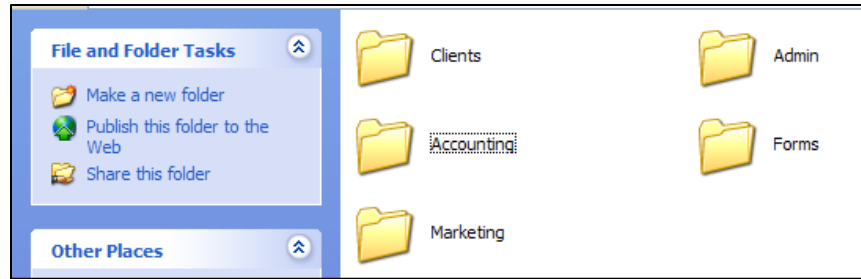
If S:\ is your server drive, you'd create a folder called S:\Clients, and sub-folders for each client thereunder:

• S:\Clients\Carsey, Joe

• S:\Clients\Cochran, Doug


Within the specific client folder, you would have a subfolder for each matter.

S:\Clients\Smith, John\Real Estate - Sale of 123 Maple St

• S:\Clients\Smith, John\Real Estate - Purchase of 400 E Main St

• S:\Clients\Smith, John\Divorce


Within each matter, you would have a subfolder for each document type (correspondence, memos, pleadings, etc.)
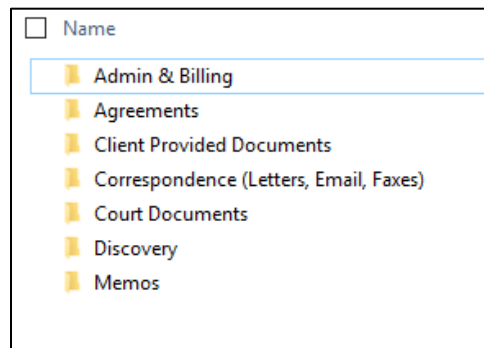


We recommend keeping an empty set of these folders and then pasting them into each matter/case created so that you have a consistent folder structure for all of your matters/cases. This will also make it much easier later down the road if you decide to purchase a full-blown legal document management system. Migrating documents to the new system will be much easier.

## SOLID NAMING SCHEME

Just like the paper file, most people would like everything sorted by true chronological date.  To accomplish this, precede every file name with a date, year first.  If you enter the date month/day/year, then all of the January files (for all years) are lumped together, all of the February files are together, etc.  Recommended naming convention:

**2020-10-30  - Letter to Rob Miller re Jared.docx**

**2020-09-10 – Letter to Jared re Paula.docx**

**2019-01-14 – Letter to Judge Smith re Nothing in Particular.pdf**

The date indicates the date the document was mailed out if it's a letter; and the longer description makes it clear what this document contains without even opening it.

## SEARCH ENGINE

If a full robust document management solution is not in your budget at the moment, or just not needed right now, you would definitely benefit from a search engine or a search program in the interim to find documents saved in the above-referenced folder structure.  These programs crawl through entire folder structures and will create an index of every single word in every single text-searchable document going back to the beginning of time (late 80's when word processors were first utilized).  See above *Searching Your Documents – Search Programs*.

# Mobile Lawyering for the Road Warrior

Presenter:  Paul J. Unger, Esq.
punger@affinityconsulting.com

Seminar Paper by:  Barron K. Henley, Esq., Partner
bhenley@affinityconsulting.com

# Mobile Lawyering for the Road Warrior

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# Mobile Lawyering for the Road Warrior

**I.**     <u>**MOBILE LAWYER DEFINED**</u>:  For purposes of this seminar, a mobile lawyer is any lawyer that works outside of the office.  This is becoming increasingly common.  Some lawyers have home offices, some prefer to work at home or somewhere other than the office.  There are also many lawyers who prefer to work part of the year from another location (i.e., beach house).  Even if you rarely work outside of the office, you'll find some mobile technology beneficial.

**II.**     <u>**BUYING A NOTEBOOK COMPUTER**</u>:

If you've shopped for a laptop computer lately, you already know that it can be pretty confusing, particularly if you're looking for a Windows machine (where the options are nearly unlimited).  The goal of this chapter is to explain what to look for, what to avoid and how to make an informed decision.  I am specifically not taking sides on the Windows versus Mac PC debate and this article should be helpful regardless of which operating system you prefer.  Further, the term "PC" as used herein refers to either a Windows or Mac computer. PC stands for personal computer which is defined as a computer designed for use by one person at a time.  Although Apple's advertisements seem to declare that its computers are something other than PCs, they are not (all MacBooks and iMacs are PCs).

This is not going to help you find the cheapest laptop possible.  If your laptop is the primary tool you use to produce work product, then it's probably the last thing you should be cutting corners on.  There are many compilations of the best "budget" laptops if that's what you're looking for[1].  The following recommendations prioritize power, portability and reliability.

Laptop configurations and models change *constantly* so there's no point in identifying a particular model and configuration to buy.  Instead, I'm going to describe what I would look for in a new laptop (component-by-component) and endeavor to explain each part of the PC so you'll understand what you're buying.  Here we go!

    **A.**     **Type of Laptop Computers Suitable for a Lawyer**:  I'm not going to explain every possible classification here because many of them are inappropriate for a law office (such as "gaming" laptops).  You want a laptop designed for business use (rather than a home user/consumer PC).  Business models tend to have longer product cycles and offer tried-and-true configurations that have been thoroughly tested.  They typically offer better warranties (on-site service and accidental damage protection), physical durability, and built-in security.

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[1] For example, see <u>The Best Cheap Laptops of 2016</u> by Laarni Almendrala Ragaza, Aug. 9, 2016 (http://tinyurl.com/27cksam).

You may also have heard of an "ultrabook" as a laptop category. Ultrabook is actually a specification for a laptop promulgated by Intel[2]. Briefly, an ultrabook is a very thin, light and powerful laptop with great battery life, touchscreen capability and advanced security. Of course, many manufacturers offer business ultrabooks. An ultrabook may take the form of a traditional clamshell laptop, or a 2-in-1 hybrid or a 2-in-1 convertible. Good examples of traditional ultrabooks include the Dell XPS 13 and the Lenovo ThinkPad X1 Carbon. A *hybrid* 2-in-1 is a laptop where the screen can be detached from the keyboard base and used as a touchscreen tablet (see a Microsoft Surface Pro 4 for example). The screen on a *convertible* 2-in-1 doesn't detach but can be flipped back, swiveled or slid into a position so that it can also be used like a touchscreen tablet (see an HP Spectre x360 for example).

B.      **What To Know About Processors**:

1.      **3/5/7 Designations**: In a nutshell, an Intel i7 processor is more powerful than an i5; and an i5 is more powerful than an i3. There are also m3, m5 and m7 processors in addition to the "i" series. The "m" processors allow manufacturers to create notebook PCs that have no cooling fans (which allows them to make thinner devices that make less noise); and the "m" processors provide longer battery life than the "i" processors. However, the "i" processors are faster. So if you value performance, look for "i" processors; and if you would prefer longer battery life and aren't as concerned about the fastest possible performance, the "m" processors should be on your shopping list. For a great explanation of the differences between "m" and "i" processors, see <u>Intel's New Core M CPU: Everything You Need to Know</u> by Avram Piltch, March 9, 2015 - <u>http://tinyurl.com/zzkxkey</u>.

2.      **Generations**: Intel has released seven "generations" of the 3/5/7 processors so the current release is creatively called "8th gen." If you're buying something new and it doesn't indicate that the processor is 8th generation, make sure you ask. You can also tell what generation a processor is by looking at the first number following the 3/5/7 designation. For example, a configuration that includes an i5-**6**570 processor is 6th generation. The number 6 that begins the four-digit number following the i5 is the indicator that it's a 6th-generation processor. If that number was a 4, it would be 4th generation. Every generation of processors gets a little faster and adds various other benefits. For the full rundown on what the 7th generation processors provide, see <u>Intel 8th Gen vs 7th Gen CPUs: Kaby Lake Refresh Is a Lot Faster</u> by By Avram Piltch, November 3, 20917 - <u>http://tinyurl.com/yd2jjcpt</u>.

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[2] See <u>http://www.intel.com/content/www/us/en/2-in-1/laptop-tablet.html</u>.

3. **Processor Recommendation**:  If you only use your PC for e-mail, Internet browsing, and light applications like word processing, an i3 would probably be fine. If you're using more taxing applications (such as case management systems, document management systems, or legal accounting programs), consider a 8$^{th}$ generation m/i5 or m/i7. Most manufacturers have 8$^{th}$-generation offerings out at this point, but there are a lot of new computers out there with 5$^{th}$ & 6$^{th}$ generation processors.  It makes sense to look for the latest generation processor unless you really want to save money by buying an older one.  Between the 5 and 7, an i5 or m5 is suitable for almost all lawyers.  If you have more demanding applications like photo/video editing or speech recognition, you may want to consider moving up to an i7 or m7.  While it may be true that "[f]or most users, the extra features and processing power of the Core i7 won't be worth the cost difference between the two tiers[3]," I've never met anyone who regretted choosing more power.

C. **Graphics or Display Adapter**:  The graphics adapter is the part of a computer which processes the images so they can be displayed on the screen or monitor.  There are two basic architectural approaches for a graphics adapter: integrated and discrete.  Integrated means "locating a computer's display circuitry in the chipset on the motherboard rather than on a separate plug-in card."  Discrete graphics adapters are typically a separate circuit board inside the computer and are more powerful than integrated adapters.  Integrated graphics adapters are typically sufficient for legal users since the applications used are not demanding from a graphics/video perspective.  However, you may want to consider a discrete graphics adapter if any  of the following apply to you:

- You want to connect a large external monitor (greater than 27");

- You want to connect to 2 or 3 monitors simultaneously;

- You need to engage in video editing; and/or

- You run graphics-intensive applications on your computer like computer-aided-design ("CAD") programs or games.

You can do all of the foregoing with integrated video, but the performance of the computer may suffer.

Having said all of that, the model of computer you choose may offer you no choice in display adapter. If it's a business computer, it will likely only offer integrated video.  I have two 24" monitors connected to a laptop with integrated video and

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[3] Intel's Core i7 is tempting, but you probably only need a Core i5 by Brad Bourque, July 4, 2016, Digital Trends, see http://www.digitaltrends.com/computing/intel-core-i5-vs-i7/.

it's fine.  However, if I had a choice between integrated and discrete, I'd go with discrete because of external monitors I connect to my laptop.  Again, no one ever regrets better performance.  Below is a screen shot of a configuration from Dell.  The Nvidia GeForce 830M is a discrete video option.  UMA (in the second option) standards for Unified Memory Architecture which means integrated video.  In my opinion, the extra $68.31 for the Nvidia GeForce is definitely worth it.

| | |
|---|---|
| ○ Intel® Core™ i5-5300U Processor, Nvidia GeForce 830M, EDock | + $68.31 |
| ◉ Intel® Core™ i5-5300U Processor, UMA, EDock | Selected |
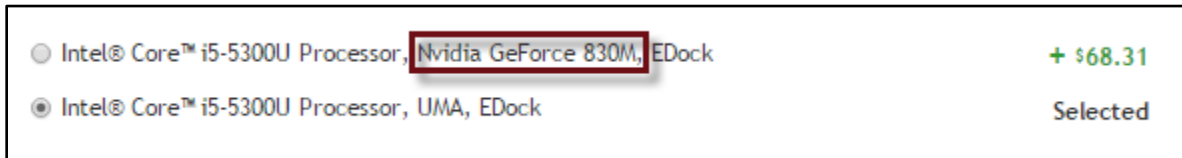
D.    **Memory or RAM**:  For normal business usage, I would recommend 8 GB of RAM.  If possible, get the memory on <u>one</u> memory chip.  Most laptops have two memory sockets on board so if you get all of your memory on one chip, then you can easily add another one later as a an upgrade.  If you get 8 GB comprised of two 4 GB chips, then to upgrade your memory, you'll have to discard half of what you already have.  You may want to consider upgrading to 16 GB of RAM if you will be doing video editing, often have many applications or browser windows open at once, work with REALLY large documents or use speech recognition software.  If you're wavering on the amount of RAM to buy now, remember that it's usually an easy DIY project to upgrade your RAM later.     Companies like http://www.crucial.com/ make it exceedingly easy to upgrade RAM because their website allows you to determine *exactly* what type of memory your computer requires and their prices are very competitive.

E.    **Hard Drive Options**:

1.    **Types of Drives**:  There are 3 kinds of hard drives, mechanical (HDD - <u>H</u>ard <u>D</u>isk <u>D</u>rive), solid state (SSD - <u>S</u>olid <u>S</u>tate <u>D</u>rive) and hybrid (SSHD).  Cutting to the chase, you want to look for SSD; but here's a good explanation of the differences between HDD and SSD:

"The traditional spinning hard drive (HDD) is the basic nonvolatile storage on a computer. That is, it doesn't 'go away' like the data on the system memory (RAM) when you turn the system off. Hard drives are essentially metal platters with a magnetic coating. That coating stores your data, whether that data consists of weather reports, a high-definition copy of the Star Wars trilogy, or your digital music collection. A read/write head on an arm accesses the data while the platters are spinning in a hard drive enclosure.

An SSD does much the same job functionally as an HDD, but instead of a magnetic coating on top of platters, the data is stored on interconnected flash memory chips that retain

the data even when there's no power present. These flash memory chips differ from the flash memory in USB thumb drives in the type and speed of the memory. That's the subject of a totally separate technical treatise, but suffice it to say that the flash memory in SSDs is faster and more reliable than the flash memory in USB thumb drives. SSDs are consequently more expensive than USB thumb drives for the same capacities.[4]"

It should also be noted that HDDs have a speed rating in terms of RPM. This refers to the speed with which the magnetic platters inside the drive rotate.  The faster they rotate, the faster your computer can access information.  You should avoid 5,400 rpm drives because they're too slow. Instead, look for a 7,200 rpm drive or faster.

A hybrid drive combines a very small SSD with an HDD in the same device. They're far less expensive than SSDs, and offer modest performance improvements.  Having said all of that, you definitely want an SSD if it's available (as mentioned above).  They cost a lot more but they're worth it. SSDs are much faster than mechanical or hybrid drives, they use less electricity, generate less heat, and have no moving parts so they are less likely to "crash." The aforementioned ultrabook definition requires an SSD.

2.   **Size**:  For most legal users, we recommend a 256 GB or 500 GB SSD.  If you store almost everything on a server, then the smaller size should be fine. If you have larger storage needs, you might be forced to go with an HDD rather than a SSD.  It's easy to find 1 TB (1,000 GB) or larger HDD options in a laptop, but more difficult to find them with an SSD.

**F.    Screen Options**:

1.   **Screen Size**:  What size screen you choose is really a matter of personal preference. My current laptop has a 13.3" screen which is extremely popular among laptop manufacturers and I like it. I have migrated over the years from a 15.6" screen to a 14" and now a 13.3".  Even though my eyes are not as good as they were when I was younger, I have no problem seeing things on my 13.3" screen.  Many models offer a 15.6-inch screen but I wouldn't recommend going larger than that.  Remember that a bigger screen generally means a heavier laptop and less battery life, but that may be worth the trade-off depending on your usage.

2.   **Resolution**:  If you have a choice of resolutions on the screen, choose a higher resolution option if you intend to plug external monitors into your

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[4] <u>SSD vs. HDD:  What's the Difference?</u> by Joel Santo Domingo, PCMag, February 17, 2015.  For the whole article, see <u>http://www.pcmag.com/article2/0,2817,2404258,00.asp</u>.

laptop and use it primarily in that arrangement. Higher resolution screens mean that everything will be sharper, but also <u>smaller</u>. As such, it does little good to get a high-resolution screen that renders everything so small that you can barely see it. If you are connecting to an external monitor, this typically is not an issue because the external monitors are so much larger. The native resolution on my Dell XPS 13 is an amazing 3,200 x 1,800. However, it made some things so small that I could barely see them. I reduced the resolution to 1,920 x 1,080 and I could see things much better.

3. **Touch**: Many laptops now offer a touch screen. Even if you don't think you'll use it, there's no reason to avoid one of these. It's actually pretty handy when you're reading a document or scrolling down a web page. Currently, no Apple laptops offer a touch screen but all of its competitors in the Windows world do. Presumably, Apple doesn't want to cannibalize its iPad sales.

4. **Recommendation**: I recommend a 13.3" or 14" touch screen if your eyesight is good enough to see things easily on a smaller screen.

G. **Operating System Considerations**:

1. **Windows PC:** If all of your software is certified to work with Windows 10, then you should definitely go with Windows 10 Pro (not Home), 64 bit.

2. **Mac PC**: There are no operating system choices to make.

H. **Warranty Options**:

1. **Recommended System Warranty**: Ideally, you want at least a 3 year, next-business day, on-site warranty with 24x7 technical support. If you think you'll be using your computer for longer, then most manufacturers will give you the option to extend your warranty to 4 or 5 years. I generally prefer to cycle out computers every 3 years so I never get a warranty beyond that. Mail-in or carry-in warranties are going to extend your downtime and likely cause you a lot of waiting and frustration. In my opinion, warranties that require me to ship my computer somewhere or take it to a store are unacceptable.

2. **Warranties from the Manufacturer Are Better**: For example, if I buy a Dell laptop from Amazon.com, they don't offer Dell factory warranties for the computer. Instead, they offer third party warranties and those warranties are, in my personal experience, *vastly* inferior to the warranties purchased directly from Dell (like Dell's ProSupport warranties).

3.    **Technical Support**:   I look for North American-based support from representatives for whom English is their first language.  Nothing is more frustrating than trying to explain a problem to someone you can't understand.  It's worth asking the question before you buy the computer - where is the support based?  If technical support is off-shore and you can't upgrade to something better, then you might want to keep looking.

4.    **Accidental Damage Protection**: If you are worried that you might accidentally break your laptop, this is an excellent added measure of protection. This protection is normally recommended for laptop computers, but it's probably not worth it for a desktop. It protects you against liquid spills, drops, falls, and surges (electrical). Manufacturers like Dell and Lenovo offer this kind of coverage and it's surprisingly inexpensive for 3 years.

**I.**    **You Can Save Money by Avoiding Apple**:

1.    **High-End Windows Machines Are Superior and Less Expensive**: To compare prices, I configured a Windows notebook computer and a MacBook Pro notebook computer with matching configurations (or at least as close as I could get them) and including MS Office 2016.  The price for the Dell Windows computer (Dell Latitude 5580) was $2,344; and the MacBook was $3,631.  That means that the Mac is $1,287 more expensive than the Dell (54%).  Furthermore, the Dell is a much better equipped machine even though I made the configurations as similar as I could.  While the Mac had no advantages over the Dell, the Dell had the following advantages over the Mac:

    a.    **More Powerful Processor**:  The Dell has a 7th generation i7-7820HQ (Quad Core, 2.9GHz up to 3.9GHz, 8M Cache) while the Mac had a 6th generation i7 2.7 GHz processor.

    b.    **Larger Screen**:  The Windows computer has a larger screen (15.6" compared to 15.4").

    c.    **Touch Screen**: The Windows computer has one and the Mac doesn't even offer one.

    d.    **Superior Warranty**:

        i.    The Windows computer has an on-site warranty (Mac is mail-in or carry-in).

        ii.    The Windows computer has a 3 year accidental damage warranty (the Mac doesn't even offer this option).

e. **Better Security**:

   i. **Antivirus**:  The Windows computer has antivirus software built in with Windows 10; the Mac does not.

   ii. **FIPS Compliant Biometric Scanner**:  The Windows computer has a fingerprint reader and advanced security (Mac does not).

f. **More Ports**:  The Windows computer has 2 USB ports, an Ethernet port, an HDMI port and a VGA port (in addition to a Thunderbolt port).  The Mac only has Thunderbolt ports.

2. **Limited Support with Apple**:

   a. **Network Support**:  If you want to set up a network with Apple PCs, you're going to find vastly fewer support options than with Windows PCs.

   b. **Support**:  Apple doesn't offer on-site warranties with its laptops.  Therefore, you'll have to ship it to them for service or find an Apple Store or other authorized service center and take it there.  Desktops to offer on-site support, but it's a last resort.

3. **Most Legal Specific Programs Will Not Run on the Apple Operating System**:  For example, the top 5 legal case management applications or top 5 time/billing and accounting programs will not run on the Mac OS.  The best document assembly or trial presentation programs also do not work on a Mac.  Finally, I've never seen a practice area-specific program that would work in the Mac OS.  For example, leading Bankruptcy programs like Best Case and leading estate planning drafting systems like WealthDocx only work in Windows.  Yes, you could run Windows on a Mac and use those programs.  However, you have to BUY Windows first and install it on your Mac.  Furthermore, many programs require a Windows server in order to run so you wouldn't be able to use an Apple server.

**J.** **Other Notebook Computer Accessories**:

1. **Travel Mouse**: If you don't like touch pads and eraser head pointing devices, you'll want a travel mouse.

   a. **Logitech Wireless Anywhere Mouse MX**:  The new Logitech Darkfield Laser Tracking works on more surfaces than other mice even on glass.  I love this mouse - $50 at www.amazon.com

b.      **Logitech MX Logitech Performance Mouse MX**:  This is a high-end mouse that will work on almost any surface, including glass. However, it's strictly for right-handed users.     $89 from www.buy.com.



2.      **3M Computer Privacy Filter**: Wandering eyes beside you see only a dark screen, it's easy to attach and remove, and it's available for laptops in many sizes.  To find the one right for your laptop, go to http://tinyurl.com/lxqcm. Expect to pay around $50.

3.      **Carrying Cases**:   You need a case to carry all of your gear around in so we recommend that you survey the field by going to **www.ebags.com** which has a vast selection of computer carrying cases.  Recommended features:

a.      Get wheels - no matter how dumb you think it looks to pull around a wheeled case, it's better than sweating through an airport with a dull throb in your shoulder which results from lugging around traditional carrying cases.

b.      Ballistic Nylon cases have much better durability over the long haul than leather

      c.        Make sure the case you choose has a well-padded computer compartment

      d.        Don't forget to get a case with room for all of your stuff. Better that you have one larger bag than several smaller ones. Remember the two carry-on limit on most flights and if you fly smaller jets or puddle-jumpers, then it might be a 1 bag limit.

## III.    <u>SECURITY ISSUES</u>:

**A.**    **Fingerprint Reader**: Fingerprint (biometric) readers allow you to block unauthorized users of your computer and login quickly without entering a password. Many manufacturers include free encryption software with your system when this option is selected. This allows you to encrypt your computer so it is unusable without a valid fingerprint swipe. This added level of security is well worth the added cost.

**B.**    **PC Encryption**: If you've got a notebook computer, there's always the chance that someone will steal it or that you'll misplace or otherwise lose it. If you have confidential client information on the laptop, then it would be prudent for you to encrypt the laptop. Encryption would prevent a thief or finder of your laptop from obtaining any information from the hard drive, even if they remove the hard drive and install it in another computer. There are many choices for this type of software, including the following:

    1.    **BitLocker** - included for free with certain versions of Windows Vista, 7, 8 & 10.

    2.    **Mac FileVault** - included for free with OSX.

    3.    **SecuriKey Pro** - www.securikey.com

    4.    **Symantec Drive Encryption** - http://tinyurl.com/39seow

    5.    **AlertBoot** - http://tinyurl.com/63h36wt

    6.    **Folder Lock** - http://www.newsoftwares.net/folderlock/

    7.    **SecureDoc Full Disk Encryption** from Winmagic Data Security - http://tinyurl.com/4vek6ot

**C.**    **Wireless Encryption**:

    1.    **Home or Work Wireless Connections**: If you rely on a wireless Internet connection at your office or home to work with sensitive client information, it goes without saying that your wireless router or access

point should be properly encrypted.  If you set it up yourself and aren't sure, then you should immediately secure the assistance of an expert to ensure that your security is properly configured.  Sometimes, it's as easy as calling the technical support line for the manufacturer of your router.  The big companies that sell wireless routers all have technical support representatives that can walk you through the process over the phone.  In case you're wondering, big names in wireless routers include Cisco, Linksys, Netgear, Belkin, TP-Link, D-Link and Asus, among others.

2.    **Risk of Using Public WiFi**:  First of all, you need to be educated about this subject.  For a quick primer, here are two short articles that will bring this issue into focus:   Here's what an eavesdropper sees when you use an unsecured  Wi-Fi  hotspot  by  Eric  Geier,  6/28/13  (see http://tinyurl.com/ppm3oyc) and What Is A Packet Sniffer? by Andy O'Donnell, 12/15/14 (see http://tinyurl.com/jxvhf92).  For an interesting discussion of this in the legal arena, see the now famous California Formal Opinion No. 2010-179 which states:

> "With regard to the use of a public wireless connection, the Committee believes that, due to the lack of security features provided in most public wireless access locations, **Attorney risks violating his duties of confidentiality and competence in using the wireless connection at the coffee shop to work on Client's matter unless he takes appropriate precautions, such as using a combination of file encryption, encryption of wireless transmissions and a personal firewall**. Depending on the sensitivity of the matter, Attorney may need to avoid using the public wireless connection entirely or notify Client of possible risks attendant to his use of the public wireless connection, including potential disclosure of confidential information and possible waiver of attorney-client privilege or work product protections, and seek her informed consent to do so."[5]

3.    **How To Protect Yourself**:

a.    **Cellphone WiFi Hotspot**:  Rather than connecting to the public WiFi where ever you are, consider using a cellular hotspot or MiFi.  Properly configured, these connections are a secure way to connect your notebook or tablet to the Internet via the phone hotspot.

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[5] See http://tinyurl.com/3szklcx, emphasis added.

b.  **Consumer VPN Services**:  There are many services that allow you to create a Virtual Private Network connection even though you're using a public and otherwise unsecured WiFi connection.  "In the simplest terms, a VPN creates a secure, encrypted connection between your computer and the VPN's server. This tunnel makes you part of the company's network as if you are physically sitting in the office, hence the name. While connected to the VPN, all your network traffic passes through this protected tunnel, and no one in between can see what you are up to. A consumer VPN service does the same thing, but extends that protection to the public."[6]  Here are some options for this.  Private Internet Access is the one I use personally.

    i.      **Hide My Ass**:  https://www.hidemyass.com/

    ii.      **Private Internet Access**:  https://www.privateinternetaccess.com/

    iii.      **IPVanish**:  https://www.ipvanish.com/

    iv.      **Cloak** (Mac only): https://www.getcloak.com/

    v.      **CyberGhost**:  http://www.cyberghostvpn.com/en_us

    vi.      **VyprVPN**:  https://www.goldenfrog.com/vyprvpn

    vii.      **NordVPN**:  https://nordvpn.com/

    viii.      **Hotspot Shield Elite**:  https://hsselite.com/

    ix.      **PureVPN**: https://www.purevpn.com/

    x.      **Spotflux Premium**: http://spotflux.com/

**D.  Firewall**:

1.  **What Is a Firewall**:  A firewall is a network security system designed to prevent unauthorized access to or from a private network. Firewalls can be hardware, software, or a combination of both.[7]

2.  **Your Obligation**:  You need to ensure that a firewall is in place at your office and anywhere you use your computer and connect to the Internet.

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[6] The Best VPN Services for 2016, by Max Eddy, Fahmida Rashid, 3/9/2016, PCMag - see http://tinyurl.com/njuv7br.
[7] See http://www.webopedia.com/TERM/F/firewall.html

You can test yourself using services like ShieldsUP![8] or HackerWatch[9].  If you aren't sure if you are being protected, then you should contact a security expert to conduct a penetration test.  Penetration testing (also called pen testing) is the practice of testing a computer system, network or Web application to find vulnerabilities that an attacker could exploit.[10]

**E.      Password Manager**:

1.      **What Is a Password Manager**:  A password manager is a program that helps one store, create and organize passwords (and logons and websites, etc.).

2.      **Why You Need A Password Manager**:  First, it's part of your estate plan. Second, it's a place to keep logons, websites, account numbers and passwords all in one place.  I use Dashlane and it will generate and store strong passwords for me (so I don't have to make them up). It will also let me know if my passwords are weak and recommend that I change them. It tells me how many different websites I'm using the same password for (it's not recommended that you use the same password for everything).  It also lets me know if there are any reported security breaches for any of the websites it holds passwords for and recommend that you change them.  Finally, it will hold all of my credit card information, secure notes about anything I want and personal information like my driver's license, passport, etc.

3.      **Good Options**:  Top rated password managers include the following (and I strongly recommend the versions you have to pay for - almost all offer a free version that is missing features):

a.      **Dashlane** - https://www.dashlane.com/

b.      **LastPass** - https://www.lastpass.com/

c.      **Sticky Password** - https://www.stickypassword.com/

d.      **LogMeOnce** - https://www.logmeonce.com/

e.      **TrueKey** - https://www.truekey.com

f.      **RoboForm** - https://www.roboform.com/

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[8] See https://www.grc.com/x/ne.dll?bh0bkyd2
[9] See http://www.hackerwatch.org/probe/
[10] See http://searchsoftwarequality.techtarget.com/definition/penetration-testing

g.    **Keeper Desktop** - https://keepersecurity.com/

F.    **Antivirus/Antimalware Software**:  It is fairly common that users think they have protective software running when they actually do not.  You should be able to confirm that protective software is running on your computer(s).  Again, you may need to consult an expert.  I personally use Bitdefender[11] which I *really* like.  Of course, there are many good options available from McAfee, Webroot, Symantec (Norton) and Kaspersky.  A good security suite (like Bitdefender Internet Security 2016) provides antivirus, web protection, vulnerability testing (to make sure you have the latest versions of programs that may represent vulnerabilities), a firewall, intrusion detection, antispam and ransomware protection.  For example, when I first ran the Bitdefender vulnerability test, it produced the following which not only told me which programs needed to be updated, but also provided links so I could get to them quickly:
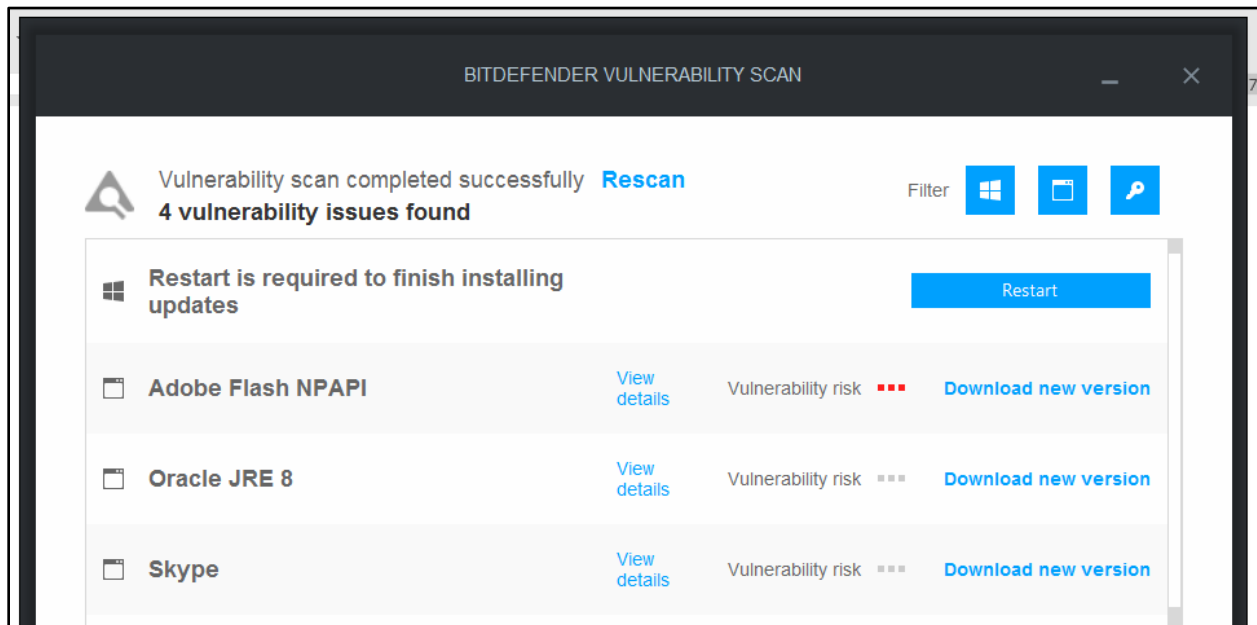


G.    **Encryption Options for Online Sync Programs Like Dropbox, OneDrive, Box and Google Drive**:  There are inexpensive and easy-to-use services that will encrypt your files before sync and file-sharing services.  These services will effectively eliminate your ability to share files with individuals outside of your office, but they also provide complete protection for your files as they are encrypted before the sync service ever gets your files.

1.    Viivo:  See https://www.viivo.com/

2.    Sookasa:  See https://www.sookasa.com/

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[11] See http://www.bitdefender.com/

3.      BoxCryptor:  See https://www.boxcryptor.com/en

H.  **External Hard Drive and Flash Drive Encryption**:  If you need to use external hard drives or flash drives, there are many choices for encrypted devices.  Of course, you can also use encryption programs like BitLocker to encrypt external devices as well.  In any event, here are some options:

1.  **External USB Hard Drives**:

a.      Apricorn Aegis Padlock 2 TB USB external hard drive.

b.      Fantom Drives DSH2000 DataShield 2TB USB external hard drive.

c.      Lenovo ThinkPad USB 3.0 Secure Hard Drive.

2.  **Flash Drives**:

a.      Apricorn Aegis Secure Key FIPS Validated 4 GB USB 2.0 256-bit AES-CBC Encrypted Flash Drive

b.      Kingston Digital 8GB Data Traveler AES Encrypted Vault Privacy 256Bit 3.0 USB Flash Drive

c.      IronKey S250 8 GB USB 2.0 Flash Drive

I.  **Develop and Follow Policies**:  There are many places to find sample policies for the following and a great resource is the SANS Institute.  To see their sample policies, just go here: https://www.sans.org/security-resources/policies.

1.  **Internet and Email Usage Policy**:  There may be (and likely is) a big gap between what you would deem acceptable use of company internet and email and what your employees deem acceptable use of those resources.  Thankfully, you can Google "internet usage policy" and find many free examples to start with.

2.  **Document and Email Retention Policy**:  Lawyers tend to hold onto every document and email forever and this is simply a bad policy.  You can end up with so much irrelevant digital clutter that you're unable to find the things you actually need.  Your policy should comply with any applicable federal or state laws, the Rule of Professional Conduct and any other relevant regulations.  It's also a great idea to contact your malpractice insurer to see what they recommend (they may even have a sample policy you could start with).  The ABA has a nice compilation of records and document retention resources (http://tinyurl.com/7z8ksye) and another excellent article to read on the subject is Sample Document-Destruction

Policy by Megan Zavieh, 1/21/14, Lawyerist.com (see http://tinyurl.com/hrs3hxy).

3. **Secure Password Policy**:

a. **Why You Need This**: You need a secure password policy because of the plethora password crackers that are out there.

b. **Types of Password Hackers**: Here are the main types (there are many more):

   i. **Dictionary attack**: This attack uses a file that contains a list of words that are found in the dictionary. This mode matches different combinations of those words to crack your device open.

   ii. **Brute force attack**: Apart from the dictionary words, brute force attack makes use of non-dictionary words too.

   iii. **Rainbow table attack**: This attack comes along with pre-computed hashes. When user passwords are stored by a service (say www.Target.com), the raw (actual) passwords are converted into a string of random characters by complicated mathematical computations. This conversion process is called hashing. For an extremely interesting article on this technology, see Hacker Lexicon: What Is Password Hashing? by Andy Greenberg, June 8, 2016[12].

c. **Examples of Password Hackers**: Just so you can appreciate how readily available these are to anyone.

   i. **John The Ripper** - http://www.openwall.com/john/

   ii. **Aircrack-ng** - https://www.aircrack-ng.org/downloads.html

   iii. **RainbowCrack** - http://project-rainbowcrack.com/

   iv. **Crowbar** - https://github.com/galkan/crowbar

   v. **Ophcrack** - http://tinyurl.com/3uyvmy

   vi. **L0phtcrack** - http://www.l0phtcrack.com/#download-form

   vii. **DaveGrohl** - https://github.com/octomagon/davegrohl

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[12] See https://www.wired.com/2016/06/hacker-lexicon-password-hashing/

There are many others like Cain and Abel, THC Hydra and HashCat.

d. **Recommended Policy**: I will warn you that a really strong password security policy can be extremely annoying because most of them recommend that you change your password every 30 days, don't repeat old ones and use unique passwords for each logon. While I appreciate the value of those rules, they would drive most people batty in short order. Here are some less annoying rules that will still help ensure your passwords are secure:

- <u>12 Characters, Minimum</u>: You need to choose a password that's long enough. There's no minimum password length everyone agrees on, but you should generally go for passwords that are a minimum of 12 to 14 characters in length. A longer password would be even better.

- <u>Include Numbers, Symbols, Capital Letters, and Lower-Case Letters</u>: Use a mix of different types of characters to make the password harder to crack.

- <u>No Dictionary Words or Combination of Dictionary Words</u>: Avoid obvious dictionary words and combinations of dictionary words. Any word on its own is bad. Any combination of a few words, especially if they're obvious, is also bad. For example, "Wagon" is a terrible password. "RedWagon" is also very bad.

- <u>Doesn't Rely on Obvious Substitutions</u>: Don't use common substitutions, either — for example, "RedWag0n" isn't strong just because you've replaced an o with 0.[13]

4. **Mobile Device Security Policy**: This policy describes protocols that must be used when using notebooks, tablets or phones to conduct legal work.

5. **Equipment Disposal Policy**: The general rule is that no mobile device, PC or copier should ever be disposed of while it still contains client data.

6. **Litigation Hold Policy**: "If you don't have one, you're asking for trouble. If you know you have been sued or are the subject of a regulatory action, or that either one is likely to occur, you are under a litigation hold and must

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[13] See <u>How to Create a Strong Password (and Remember It)</u> by Chris Hoffman, 5/29/15, How-To- Geek, see <u>http://tinyurl.com/kx6s7uf</u>.

proceed expeditiously to preserve the relevant electronically stored information."[14]  A couple of good resources to start with are:

- Ten Things to Consider When Establishing a Legal Hold Policy by Stephanie Fox (4/26/2013), Association of Corporate Counsel, see http://tinyurl.com/zspaybw.

- Implementing a Litigation Hold by Nicholas Panarella and Wook Kim, Kelley Drye LLP (2012) Practical Law Publishing Limited and Practical Law Company, Inc., see http://tinyurl.com/hh4kwy2.

7.  **Notebook Lock**: These are necessary if you occasionally have to leave the notebook unattended.  There are dozens of options for this and most of them cost less than $20.  If you go to any online vendor's site and search the terms "notebook lock" you'll find many options.

8.  **Recovery Tag Your Laptop**: This is a simple idea that really works.  You put small stickers on each piece of hardware (laptop, PDA, etc.) which has a phone number people can call to return it to you if it is found.  Check out these services:

- www.boomerangit.com

- www.stuffbak.com

- www.returnmoi.com

- www.trackitback.com

- www.YouGetItBack.com

- www.zreturn.com

9.  **Recovery Software for your Laptop**: These services install a program on your laptop that can't be removed, even if the hard drive is reformatted.  If your laptop is stolen and the thief reconnects to the Internet, the program starts sending out a homing beacon.  The responsible company works with local law enforcement to try and recover your computer.  Yes, it really works!  Consider these services:

- www.lojackforlaptops.com

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[14] Essential Law Firm Technology Policies and Plans by John W. Simek and Sharon D. Nelson, Law Practice Magazine, March/April 2012, see http://tinyurl.com/8yvvdkq.

- www.pcphonehome.com

- www.locatemylaptop.com

- www.ztrace.com/zTraceGold.asp

**IV.**     <u>**OTHER COMPONENTS OF YOUR MOBILE OFFICE**</u>:

**A.**     **Tablet**: Many lawyers find a tablet to be an important part of their technology arsenal. Although the iPad established this category, there are many choices including the Goolgle Pixel, Kindle Fire and Microsoft Surface Pro.

**B.**     **Backup Options**: You absolutely must backup everything, every day. Here are some ideas for protecting yourself against data loss.

    1.     **Synchronize With Server or Other Computers/Devices**: If you have a server that is backed up every night (as it should be), then you can simply synchronize with it and you're covered. You could also synch with an external hard drive. Good options here include Dropbox, Box, Office 365, & SpiderOak.

    2.     **Internet Backup Options**: Many of the good backup systems listed below will simultaneously backup to the cloud and to any external hard drive. I use Carbonite Personal Plus which only costs $99/year for unlimited storage and it also backs up to an external hard drive. If that wasn't enough, it also keeps unlimited versions of every file on my computer.

**C.**     **Smartphones**: You obviously need a good smartphone to be truly mobile. A VoIP office phone system is also portable.

**D.**     **Noise Canceling Headphones**: You're unquestionably going to find yourself in noisy places where you still need to get work done. Tune out the ambient noise with a great set of noise canceling headphones you can plug into your computer, music player or cell phone that plays digital music. There are many of these to choose from.

**E.**     **Digital Voice Recorder**:

    1.     **Benefits of Digital**: Digital voice recorders do not use tapes because they store your recorded voice digitally on memory chips inside the device. Since there are no moving parts inside a digital voice recorder, the batteries tend to last longer. There are no tapes to buy or erase every time you want to record something. The recorded voice quality is vastly superior to that of tape-based recorders and the recorders themselves are typically smaller than tape recorders. A digital audio file has many advantages over tape, including easy storage and portability. Used both in

the office and out of the office, an attorney can dictate into a handheld digital recorder, automatically transfer the dictation to a computer, and instantly email the audio file containing the dictation to his or her secretary in the next room or hundreds or thousands of miles away.  If you are not using voice recognition software, there are digital dictation foot pedals that connect to a secretary's or legal assistant's computer via USB or serial port that work like traditional tape based pedals.  The document is then transcribed and returned by email to the lawyer for final proofing and editing.  The edited version can sent by return email back to the office to be printed and mailed.

2. **Occasional Dictation Recommended Recorder**: If you want something small and handy for when you're in the car  (for example), consider something like the Sony Digital Voice Recorder  ICD-PX720.  Capture your next big idea with this digital voice recorder. Playback and record MP3s and store up to 280 hours of crystal clear audio. Expect to pay around $55.

3. **Serious Dictation Recommended Recorders**: If you dictate frequently, then you have two basic options for a high-end digital voice recorder: Philips and Olympus.  Their highest-end products are as good as it gets.

F. **Portable Scanners**:

1. **Why a Portable Scanner?** If you've got a portable scanner, then you essentially have a copier with you as well since you can always scan something and then print it on your portable printer.  For example, consider the Fujitsu ScanSnap S1300i or the ScanSnap S1100.

G. **Power for the Road**:

1. **Monster Outlets To Go Powerstrip**:  Designed for travel from the ground up, the award-winning Monster design team created a truly portable outlet strip: Outlets To Go. Exclusive Monster features include ultra-flat design with FlatProfile™ Plug and FlatWrap™ Cord for neat and compact storage. Outlets To Go is so light and thin, you'll take it everywhere! Better yet, the space-saving 3-outlet Dual-Side design with extra-wide spaced outlets prevents bulky AC adapters from blocking free outlets. Part number MP OTG300 BK EFS - $10 from www.amazon.com.

2.   **Tripp Lite The Traveler - Surge suppressor**: Tripp Lite's portable TRAVELER surge suppressor offers complete AC and phone line surge suppression for laptops, electronic notepads, personal organizers and other portable electronic devices. Extra-small portable housing weighing less than 4 ounces neatly fits into laptop travel cases. Retractable input plug prevents scratching of expensive portable electronics. Heavy grade AC surge suppression shields connected equipment from damage and performance problems due to transient surges. Set of RJ11 telephone line suppression jacks protect dialup and DSL modem lines. TRAVELER offers 2 total outlets in a space saving direct plug-in format and diagnostic LEDs to warn of wiring problems and suppressor damage. Heavy grade AC suppression is rated at 870 joules shields equipment from surges and line noise. - $11.99 at www.buy.com.



3.   **Targus® Compact Laptop AC Charge**:  Half the size and weight of typical AC chargers.  Easily powers or charges your laptop and one additional

device at the same time.  Includes 9 laptop tips and 1 mini-USB tip for cell phones, cameras or other compatible devices.  Additional tips are available from the manufacturer. AC plug pivots up to 180°.  Allows charger to plug into a power strip without blocking other outlets. The plug can fold flush with charger, for added portability. Integrated tip storage clips onto the power cord.  The thin, lightweight power cord packs quickly and easily.  $99 from www.officedepot.com

4. **External Battery**:  You never know when you'll need more juice for your phone, tablet or laptop.

## V. <u>WORKING REMOTELY</u>:

A. **Scanning Is Critical for Remote Work**:  With a good scanner, it's possible to create folders for each of your active matters which contain everything that your paper file contains.  Specifically, I mean that you have electronic versions of documents you created in-house, documents you received, notes, email, email attachments and faxes. Once you achieve that, then two important things happen.  First, you can take all of your client files with you wherever you go without carrying a single piece of paper.  Second, you'll stop caring about the paper file because the electronic one is far easier to find.

B. **Recommended Scanners for a Law Office**: If the scanner you're considering has the right driver to work with your PDF software or if the scanner comes with the software necessary to create PDFs, then you're probably fine.  However, here are a few scanners we particularly like.

1. **Basic Scanners Types**:

a. **Flatbed Scanners**: A flatbed scanner consists of a flat surface on which you lay documents to be scanned.  They're very similar to a copier in appearance and they're particularly effective for bound documents.  You can buy flatbed scanners with or without an automatic document feeder ("ADF").  However, buying one

without an ADF is a complete waste of money as it will take an inordinately long time to scan any multi-page document. No one will like it and no one will use it. A flatbed scanner with an ADF will allow you to scan regular cut sheets of paper or bound materials. However, they're generally slower and more expensive than their sheet-fed counterparts (see below).

b.  **Sheet-Fed Scanners**: Sheet-fed scanners lack the flat glass surface for scanning bound materials; and they only have an automatic document feeder. However, sheet-fed scanners are generally faster and less expensive than flatbed scanners. Of course, if the only type of scanner you have is a sheet-fed scanner and you need to scan bound materials, you could always copy the appropriate pages and then scan them.

2.  **Recommended Flatbed Scanners**:

a.  **Fujitsu fi-6230z Scanner**: Scans b&w one-sided (simplex) at 40 pages per minute or double-sided (duplex) at 80 pages per minute. Also capable of color scanning; and handles letter or legal sized paper. This scanner connects to your computer via USB 2.0. This scanner is small and quiet, handles color, black & white and grayscale. Best of all, it has a 100 sheet automatic document feeder (ADF). Comes with Kofax® VRS® Professional, Adobe® Acrobat® Standard, and ScandAll Pro. Part number PA03630-B555, $1,307 from www.costcentral.com. Canadian part number is PA03630-B552 - $1,281 from www.pc-canada.com.

b.  **Fujitsu fi-6240z Scanner**: Scans b&w one-sided (simplex) at 60 pages per minute or double-sided (duplex) at 120 pages per minute. Also capable of color scanning; and handles letter or legal sized paper. This scanner connects to your computer via USB 2.0. This scanner is small and quiet, handles color, black & white and grayscale. Best of all, it has a 100 sheet automatic document feeder (ADF). Comes with Kofax® VRS® Professional, Adobe® Acrobat® Standard, and ScandAll Pro. Part number PA03630-B505, $1,908 from www.costcentral.com. Canadian part number is PA03630-B502 - $1,918 from www.pc-canada.com.

3.  **Recommended Sheet-Fed Scanners**:

a.  **Fujitsu ScanSnap iX500 Sheet-Fed Scanner**: Sheet-fed, scans 25 ppm simplex, 50 ppm duplex, no TWAIN driver, but comes with Adobe Acrobat X Standard and works fine with it. This scanner is both Windows and Mac compatible. The US mnfg. part number is

PA03656-B005 and it costs $420 from www.pcnation.com. The Canadian part number is PA-03656-B002 and it costs CDN$498 from www.amazon.ca.

b.  **Canon imageFORMULA DR-C225**: Sheet-fed, scans 25 ppm simplex, 50 ppm duplex, TWAIN compliant, 30 sheet feeder, USB 2.0. US & Canadian Part number 9706B002 and it costs $400 from www.amazon.com and CDN$584 from www.pc-canada.com.

c.  **Canon imageFORMULA DR-C130**: Sheet-fed, scans 30 ppm simplex, 60 ppm duplex, TWAIN compliant. USB 2.0 and TWAIN compliant. The US & Canadian part number is 6583B002 and it costs $510 on www.amazon.com and CDN$663 from www.pc-canada.com.

d.  **Fujitsu Fi-7160 Sheet-Fed Scanner**: Up to 60 ppm/120 ppm duplex black and white or grayscale. Rapid power up time in less than 4 seconds; large capacity 80 page feeder; plastic and embossed credit card scanning; long document support up to 18.3 feet; scan sticky notes, taped receipts, and labels while securing against multifeeds; innovative acoustic paper protection; Interactive, Multi-Line LCD Panel; Auto rotation, Auto size, Blank page removal, Auto color detection, and Assisted scanning features; TWAIN and ISIS drivers  The US part number is PA03670-B055, and it's $875 from www.amazon.com; the Canadian part number is PA03670-B052 and it's $894 from www.pc-canada.com.

e.  **Fujitsu fi-7180 Sheet-Fed Scanner**: Up to 80 ppm/160 ppm duplex black and white or grayscale. Rapid power up time in less than 4 seconds; large capacity 80 page feeder; plastic and embossed credit card scanning; long document support up to 18.3 feet; scan sticky notes, taped receipts, and labels while securing against multifeeds; innovative acoustic paper protection; Interactive, Multi-Line LCD Panel; Auto rotation, Auto size, Blank page removal, Auto color detection, and Assisted scanning features; TWAIN and ISIS drivers  The US part number is PA03670-B005, and it's $1,514 from www.amazon.com; the Canadian part number is PA03670-B002 and it's $1,429 from www.pc-canada.com.

C.  **Get High Speed Internet From Anywhere**:

1.  **Air Cards or USB Modems**: All of the major cell services offer a card you can plug into your notebook computer and gain Internet access from almost anywhere. Pricing is usually $50 to $80 per month and the cost is determined by the monthly data allowance your choose.

2. **Mobile HotSpot**: This is a standard smartphone feature you can add (it typically costs an additional $20/month) which allows you to transmit a web connection to up to 10 computers/devices.

3. **Tethering**: Provided your phone offers this functionality, most cell phone providers offer an option which allows you to connect your notebook to the Internet using the cell phone as a modem. For example, I have a Blackberry through Verizon. I can connect it to my notebook via the sync cable that came with it. Once the phone is connected to my notebook, I just run a little program Verizon provides and my laptop is connected to the Internet in about 60 seconds. It is not a rocket-fast connection, but certainly fast enough for me to browse the internet, take care of email, etc. You can also accomplish this if your phone has "mobile hotspot" capability. This feature usually allows up to 5 computers to connect to the internet via the phone, all wirelessly.

4. **MiFi**: These are portable broadband wireless device about the size of a credit card that combines functions of a modem, router and access point. For a really great example of this, check out the Virgin Mobile MiFi service (http://tinyurl.com/24dhlzb).

D. **Accessing Other Computers Remotely**: When you're on the road, you often need to connect to PCs back at the office. Here are some options:

1. **Logmein.com**: If you need to be able to access a computer at your office when you're on the road, this is the best free option out there. Gives you the ability to easily control the mouse and keyboard of any remote PC. You can open remote files, check your email, run programs, run system diagnostics, access from any browser, access from wireless Pocket PC and it's all easy to use. $49/<u>year</u> for up to 2 computers; $129/year for up to 5 computers; and $229/year for up to 10 computers.

2. **Gotomypc.com**: $9.95/month - see www.gotomypc.com. Take over any other PC via the Internet. Unlimited remote access to your PCs from any other Internet-connected computer; ability to swap host PCs at will; unlimited software and service upgrades; unlimited technical support and maintenance. Absolutely amazing service which we highly recommend.

3. **TeamViewer**: See http://www.teamviewer.com. This service has free and pay options.

E. **Online (Web) Meetings**: It makes little sense to waste time and money traveling around the country for meetings when you can often accomplish the same thing from your office via web meetings. These meetings usually do not involve web cameras so the others in the meeting can't see your face. However, they can hear

your voice and see whatever you want to show them on your computer.  This is often all you need for a successful meeting.  Some options to consider:

1.      **Join.Me** (http://join.me)

2.      **GoToMeeting** (www.gotomeeting.com)

3.      **WebEx MeetMeNow** (www.webex.com):

4.      **Adobe Acrobat Connect** (http://tinyurl.com/2nbcwt)

5.      **Microsoft Office Live Meeting** (http://tinyurl.com/yuugt2):    Very inexpensive - contact www.EventBuilder.com.

F.      **Faxing Outside of the Office**:  If you've got an internet connection, then you can send and receive faxes from the road.  Internet faxing options allow you to fax directly from your PC without using a fax modem or a telephone line.

1.      **RingCentral**:  www.ringcentral.com.

2.      **Myfax**: www.myfax.com.

3.      **EFax**: www.efax.com.

4.      **GreenFax**: www.greenfax.com.

# Cybersecurity and Ethical Pitfalls of Everyday Law Office Computing

*Paul J. Unger, Esq. (*punger@affinityconsulting.com*)*
*Affinity Consulting Group*
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Protection of client information, confidences and secrets is one of the most sacred traits defining the relationship between attorneys and their clients.  Without a proper understanding of technology, you may be compromising that relationship.  Email, cloud computing, traditional computers, smartphones, tablets, networks, viruses, worms, spyware, metadata, electronic court filings, just to name a few, may already be compromising that relationship without you even knowing it.

Take email as an example.  In 2020, the average legal professional will receive between 125-150 messages daily.   Without question, email is one of the most important technological communication advancements of the past 100 years.  It has fundamentally changed the way we communicate with clients and the way that we do business.  Major corporations and law firms are run via email communication instead of face-to-face communication.  For lawyers, emails present a wide array of issues that most of the business world and ordinary consumers will never face.

Under ABA Model Rule 1.6, Attorneys have a broad obligation to act competently and reasonably protect client information and confidences.  Rule 1.6 (replacing DR 4-101) revised the scope of confidential information.  Similarly, in Canada, Model Code of Professional Conduct, Rule 3.3 requires the same protection of client information and confidences.  Practicing law without technology (and email) has almost become an impossibility.  However, law and technology have become so intertwined that you can find yourself in many ethical dilemmas pretty quick.  This seminar and article seek to address these issues that may lead to an ethical violation or malpractice.

## "Competence" Re-Defined and Taking Reasonable Steps to Protect Client Information

**National Trend – Examples**

**Pennsylvania (approved October 22, 2013)**

**Rule 1.1 – Comment 8:  Maintaining Competence**
[8] To maintain the requisite knowledge and skill, a lawyer must keep abreast of changes in the law and its practice, <u>including the benefits and risks associated with relevant technology</u>, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.

Pennsylvania was the first state to adopt the new language. 38 states have adopted the Duty of Technical Competence.  Some of those include:

Alaska (effective October 15, 2017)
Arkansas (effective June 26, 2014)
Arizona (effective January 1, 2015)
Colorado (approved April 6, 2016)
Florida (effective January 1, 2017)
Indiana (effective January 1, 2018)
Illinois (effective January 1, 2016)
Kansas (effective March 1, 2014)
Kentucky (effective January 1, 2018)
Louisiana (adopted April 11, 2018)
Michigan (effective January 1, 2020)
Minnesota (approved February 24, 2015)
Missouri (approved Sept. 26, 2017)
New Hampshire (effective January 1, 2016)
New York (adopted March 28, 2015)
North Carolina (approved July 25, 2014)
Ohio (effective April 1, 2015)
Oklahoma (adopted September 19, 2016)
Pennsylvania (effective October 22, 2013)
South Carolina (approved November 27, 2019)
Virginia (effective March 1, 2016)
Washington (effective Sept.1, 2016)
West Virginia (effective January 1, 2015)
Wisconsin (effective January 1, 2017)

Some states have not yet adopted the new language within their rules of professional responsibility.  As of March of 2020, those include:

Oregon
Nevada
Mississippi
Alabama
Georgia
Maine
Maryland
New Jersey

Some states have not adopted the rule change, but have addressed it in an ethics opinion.  For example, **California** has not formally adopted the change to its rules.  However, they expressly acknowledge the duty of technical competence in Formal Opinion No. 2015-193, and even cites ABA's Comment 8.

As another example, **Oregon** in Formal Opinion 2011-187 imposes a duty of technical competence *when dealing with metadata* and cites Arizona Ethics Op No. 07-03.  It is reasonable to conclude that all Oregonian attorneys should have general technical competence (not just technical competence with metadata) in light of this opinion on metadata and the national trend.

**Ohio Rule 1.6 (and Model Rule 1.6) + Comments 18 & 19**

**Rule 1.6(c) – Confidentiality of Information**:  A lawyer shall make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client.

**Rule 1.6 – Comment 18 & 19:  Acting Competently to Preserve Confidentiality**

[18] Paragraph (c) requires <u>a lawyer to act competently to safeguard information</u> relating to the representation of a client against unauthorized access by third parties and against inadvertent or unauthorized disclosure by the lawyer or other persons who are participating in the representation of the client or who are subject to the lawyer's supervision. The unauthorized access to, or the inadvertent or unauthorized disclosure of, information relating to the representation of a client does not constitute a violation of paragraph (c) if the lawyer has made reasonable efforts to prevent the access or disclosure. <u>Factors to be considered in determining the reasonableness of the lawyer's efforts include, but are not limited to, the sensitivity of the information, the likelihood of disclosure if additional safeguards are not employed, the cost of employing additional safeguards, the difficulty of implementing the safeguards,</u> and the extent to which the safeguards adversely affect the lawyer's ability to represent clients (e.g., by making a

device or important piece of software excessively difficult to use). A client may require the lawyer to implement special security measures not required by this Rule or may give informed consent to forgo security measures that would otherwise be required by this Rule.

[19] When transmitting a communication that includes information relating to the representation of a client, the lawyer must take reasonable precautions to prevent the information from coming into the hands of unintended recipients. This duty, however, does not require that the lawyer use special security measures if the method of communication affords a reasonable expectation of privacy. Special circumstances, however, may warrant special precautions. Factors to be considered in determining the reasonableness of the lawyer's expectation of confidentiality include the sensitivity of the information and the extent to which the privacy of the communication is protected by law or by a confidentiality agreement. A client may require the lawyer to implement special security measures not required by this Rule or may give informed consent to the use of a means of communication that would otherwise be prohibited by this Rule. Whether a lawyer may be required to take additional steps in order to comply with other law, such as state and federal laws that govern data privacy, is beyond the scope of these Rules.

Similarly, many other states have taken the same approach in their comments, as the ABA and Ohio.  Take Oklahoma as an example:

**Oklahoma Rule 1.6**

**Acting Reasonably to Preserve Confidentiality**

[16] Paragraph (c) requires a lawyer to act reasonably to safeguard information relating to the representation of a client against inadvertent or unauthorized disclosure by the lawyer or other persons who are participating in the representation of the client or who are subject to the lawyer's supervision. See Rules 1.1, 5.1, and 5.3. The unauthorized access to, or the inadvertent or unauthorized disclosure of, information relating to the representation of a client does not constitute a violation of paragraph (c) if the lawyer has made reasonable efforts to prevent the access or disclosure. Factors to be onsidered in determining the reasonableness of the lawyer's efforts include, but are not limited to, the sensitivity of the information, the likelihood of disclosure if additional safeguards are not employed, the cost of employing additional safeguards, the difficulty of implementing the safeguards, and the extent to which the safeguards adversely affect the lawyer's ability to represent clients (e.g., by making a device or important piece of software excessively difficult to use). A client may require the lawyer to implement special security measures not required by this Rule or may give informed consent to forgo security measures that would otherwise be required by this Rule. Whether a lawyer may be required to take additional steps to safeguard a

client's information in order to comply with other law, such as state and federal laws that govern date privacy or that impose notification requirements upon the loss of, or unauthorized access to, electronic information, is beyond the scope of these Rules. For a lawyer's duties when sharing information with nonlawyers outside the lawyer's own firm, see Rule 5.3, Comments [3] -[4].

[17] When transmitting a communication that includes information relating to the representation of a client, the lawyer must take reasonable precautions to prevent the information from coming into the hands of unintended recipients. This duty, however, does not require that the lawyer use special security measures if the method of communication affords a reasonable expectation of privacy. Special circumstances, however, may warrant special precautions. Factors to be considered in determining the reasonableness of the lawyer's expectation of confidentiality include the sensitivity of the information and the extent to which privacy of the communication is protected by law or by a confidentiality agreement. A client may require the lawyer to implement special security measures not required by this Rule or may give informed consent to the use of a means of communication that would otherwise be prohibited by this Rule. Whether a lawyer may be required to take additional steps in order to comply with other law, such as state and federal laws that govern data privacy, is beyond the scope of these Rules.

## Louisiana Rule 1.6 – Comments 18 and 19

[18] Paragraph (c) requires a lawyer to act competently to safeguard information relating to the representation of a client against unauthorized access by third parties and against inadvertent or unauthorized disclosure by the lawyer or other persons who are participating in the representation of the client or who are subject to the lawyer's supervision. See Rules 1.1, 5.1 and 5.3. The unauthorized access to, or the inadvertent or unauthorized disclosure of, information relating to the representation of a client does not constitute a violation of paragraph (c) if the lawyer has made reasonable efforts to prevent the access or disclosure. Factors to be considered in determining the reasonableness of the lawyer's efforts include, but are not limited to, the sensitivity of the information, the likelihood of disclosure if additional safeguards are not employed, the cost of employing additional safeguards, the difficulty of implementing the safeguards, and the extent to which the safeguards adversely affect the lawyer's ability to represent clients (e.g., by making a device or important piece of software excessively difficult to use). A client may require the lawyer to implement special security measures not required by this Rule or may give informed consent to forgo security measures that would otherwise be required by this Rule. Whether a lawyer may be required to take additional steps to safeguard a client's information in order to comply with other law, such as state and federal laws that govern data privacy or that impose notification requirements upon the loss of, or unauthorized access to, electronic information, is

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## Cloud Computing

Cloud computing is an umbrella term that covers several concepts.  Within the scope of legal technology, it most often refers to Software-As-A-Service ("SaaS").  There are a ridiculous number of definitions of SaaS, but I think this one sums it up succinctly without using 15 more acronyms requiring definitions:

> "Generally speaking, it's software that's developed and hosted by the SaaS vendor and which the end user customer accesses over the Internet. Unlike traditional packaged applications that users install on their computers or servers, the SaaS vendor owns the software and runs it on computers in its data center. The customer does not own the software but effectively rents it, usually for a monthly fee. SaaS is sometimes also known as hosted software or by its more marketing-friendly cousin, 'on-demand.'"

To be clear, this means that you do not have the software installed on your computer - it is accessible only via a browser on the Internet.  Further, your data and/or documents are located on the vendor's servers and not on your computer or server.

This obviously raises ethical concerns because you are entrusting client confidential information with someone other than you and your employees.

An excellent compilation of ethics decisions around the country can be found at the ABA Law Practice Management Section's Legal Technology Resource Center (LTRC).

http://www.americanbar.org/groups/departments_offices/legal_technology_resources.html

Probably the best decision that I have read to date in the U.S. comes from Pennsylvania:

http://www.americanbar.org/groups/departments_offices/legal_technology_resources/resources/charts_fyis/saas.html

Pennsylvania, and nearly every jurisdiction who has addressed the issue employ a standard of reasonableness and typically requires segregation of data, privacy/security of data, ability to keep a local download, and reliability of the vendor.  The court stated:

The standard of reasonable care for "cloud computing" may include:

- Backing up data to allow the firm to restore data that has been lost, corrupted, or accidentally deleted;

- Installing a firewall to limit access to the firm's network;

- Limiting information that is provided to others to what is required, needed, or requested;

- Avoiding inadvertent disclosure of information;

- Verifying the identity of individuals to whom the attorney provides confidential information;

- Refusing to disclose confidential information to unauthorized individuals (including family members and friends) without client permission;

- Protecting electronic records containing confidential data, including backups, by encrypting the confidential data;

- Implementing electronic audit trail procedures to monitor who is accessing the data;

- Creating plans to address security breaches, including the identification of persons to be notified about any known or suspected security breach involving confidential data;

- Ensuring the provider:

  - explicitly agrees that it has no ownership or security interest in the data;

  - has an enforceable obligation to preserve security;

  - will notify the lawyer if requested to produce data to a third party, and provide the lawyer with the ability to respond to the request before the provider produces the requested information;

  - has technology built to withstand a reasonably foreseeable attempt to infiltrate data, including penetration testing;

  - includes in its "Terms of Service" or "Service Level Agreement" an agreement about how confidential client information will be handled;

  - provides the firm with right to audit the provider's security procedures and to obtain copies of any security audits performed;

- will host the firm's data only within a specified geographic area. If by agreement, the data are hosted outside of the United States, the law firm must determine that the hosting jurisdiction has privacy laws, data security laws, and protections against unlawful search and seizure that are as rigorous as those of the United States and Pennsylvania;

- provides a method of retrieving data if the lawyer terminates use of the SaaS product, the SaaS vendor goes out of business, or the service otherwise has a break in continuity; and,

- provides the ability for the law firm to get data "off" of the vendor's or third party data hosting company's servers for the firm's own use or in-house backup offline

- Investigating the provider's:

  - security measures, policies and recovery methods;

  - system for backing up data;

  - security of data centers and whether the storage is in multiple centers;

  - safeguards against disasters, including different server locations;

  - history, including how long the provider has been in business;

  - funding and stability;

  - policies for data retrieval upon termination of the relationship and any related charges; and,

  - process to comply with data that is subject to a litigation hold.

- Determining whether:

  - data is in non-proprietary format;

  - the Service Level Agreement clearly states that the attorney owns the data;

  - there is a 3rd party audit of security; and,

  - there is an uptime guarantee and whether failure results in service credits.

- Employees of the firm who use the SaaS must receive training on and are required to abide by all end-user security measures, including, but not limited to, the creation of strong passwords and the regular replacement of passwords.

- Protecting the ability to represent the client reliably by ensuring that a copy of digital data is stored onsite.

- Having an alternate way to connect to the internet, since cloud service is accessed through the internet.

In Oregon, while the model rule language in Comments 18 & 19 has not been explicitly adopted, in Formal Opinion No. 2011-188 (revised 2015) they have adopted "the rule to act reasonably" as it applies to an attorneys obligation under Rule 1.6 to protect client confidential information. Opinion 2011-188 specifically concludes that an attorney may contract with a third-party vendor to store and retrieve files online via the Internet (i.e., cloud computing).

In Canada, only the Law Society of British Columbia has directly addressed cloud computing, and the Legal Education Society of Alberta has adopted the same standard. It seems to be a higher standard than the U.S., and many practicing in other areas of Canada that haven't addressed it have felt comfortable following the U.S. rules. The Law Society of BC developed an extensive checklist that is submitted as a separate paper hereto. The checklist encourages potential cloud service users to consider, among other things:

- use of a private cloud, which is designed to offer the same features and benefits of public cloud systems without some of the typical cloud computing concerns such as data control, security, and regulatory compliance;
- encryption of data using a 3rd party encryption product and the compatibility of the 3rd party product with the cloud provider's product and services;
- data security and responsibility for specific aspects of security, including firewall, encryption, password protection and physical security;
- regulatory requirements, including statutory privacy requirements, retention periods indicated in the LSBC Rules, the ability to produce documents with respect to a LSBC investigation in the form and time prescribed, and the retention of custody over client data;
- adequacy of remedies in the event of data breaches, data loss, indemnification obligations, and service availability failures;
- the cloud provider's breach notification obligations;
- termination of the services agreement with the cloud provider, specifically as it relates to issues including cost, service level failures (bandwidth, reliability, etc.), data availability after termination, and transition services;

- technical considerations, including compatibility with existing systems, uptime, redundancies, bandwidth requirements, security measures, and technical support service availability; and
- the track record of the cloud services provider (such as uptime, security, support service level, etc).

The above is neither an exhaustive list of applicable considerations nor a complete summary of the Checklist.

**Advantages of Cloud Computing (Saas):**

- Up Front Price Advantage:  Let's say you want to start using a case management application for your practice.  If you were to buy one such as Time Matters, you would have to pay for the software outright along with the annual maintenance contract which is mandatory ($905 for the first license and $525 for each license thereafter).  You may have to buy a file server or otherwise upgrade your hardware in order to run the program.  For an example cost, a new server plus installation and setup could easily run $5,000 - $8,000.  Therefore, buying software may turn out to be quite expensive.  In the alternative, you would begin subscribing to something like www.rocketmatter.com in which case you would pay $59.99 for the first user per month and $49.99 per user for the next 5 users per month.  You wouldn't have to buy a server and you probably wouldn't have to upgrade any of your existing equipment assuming you already have high speed Internet access.

- Ease of Use:  Most cloud web-based applications (not all) are very easy to use.

- New Hardware often <u>NOT</u> Required:  If you already have a computer and high speed Internet access, then you probably don't need anything else from a hardware perspective.

- Works in Apple or Windows:  Since these applications are browser based, they will usually work with both Apple and Windows computers.

- Updates Included:  Most cloud application include all updates which are installed for you.

- Technical Support Included:  With most cloud applications, you get "free" technical support included with your monthly subscription fee.  Of course, purchased software also provides technical support but it is often an extra fee on top of the original software purchase price.

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- Access From Anywhere:  As long as you're using a computer with internet access, you can probably use your cloud applications.  You wouldn't need a VPN, Gotomypc, or any other type of additional remote access application to accomplish this.

- Share Applications Among Users Spread Out Geographically:  For lawyers with multiple offices or who wish to work from multiple locations, cloud applications provide a lot of flexibility.  Of course, there are other ways to gain access to programs besides subscribing to cloud applications, but this feature is obviously built in to cloud apps without buying anything else.

- Data Backup Provided:  Since your data is stored on the host company's servers, they almost always provide backup services along with that so that there is little (if any) risk that you would lose your data or access to your application due to a physical hardware failure.

**Some of the Disadvantages:**

- Nearly All Cloud Applications Are Inferior To Their Shrink Wrapped Counterparts: We have tested dozens of cloud applications and have found only a few that are as functionally complete as server or PC based software.  For example, Google Docs  is virtually useless for drafting legal documents.  You can't even do something as basic outline automatic paragraph numbering.  Even the Microsoft Word Web App is pathetically inadequate compared to the desktop version of MS Word.  So for something as fundamental as word processing, there are no cloud options which are even close to the functionality built into MS Word 2010.

- Give Up Integration:  If I have a case management system like Amicus Attorney, it can integrate (share data) with Microsoft Word, my accounting program (PCLaw, Tabs, Timeslips, QuickBooks, etc.), and my document management program (Worldox).  It can synchronize with Microsoft Outlook.  All of these things are possible because Amicus Attorney and all of the other programs I mentioned are installed on my computer and server.  In other words, they're not in the cloud.  So let's say I decided to try an cloud based case management program instead of Amicus Attorney (there are many to choose from).  Since the case management program isn't installed on my server, it can't integrate with Word, my accounting program or my document management program; and it certainly can't synchronize with Outlook.  It also cannot sync its calendar, contacts or tasks with any smart phone.  So now I am forced to enter everything at least twice and maintain two separate databases of client data.  Obviously, this destroys the efficiency I had when everything was installed locally.

- Usually More Expensive:  These technology rental programs were not designed by the vendors to take less money from you.  To the contrary, they are generally designed to take more money from you over a longer period of time.  Here's a great quote on the subject:

  > "The tech press is full of people who want to tell you how completely awesome life is going to be when everything moves to 'the cloud' – that is, when all your important storage, processing and other needs are handled by vast, professionally managed data-centers. Here's something you won't see mentioned, though: the main attraction of the cloud to investors and entrepreneurs is the idea of making money from you, on a recurring, perpetual basis, for something you currently get for a flat rate or for free without having to give up the money or privacy that cloud companies hope to leverage into fortunes."

- In almost every case we've looked at, the subscription model becomes more expensive than buying an equivalent program outright by about the 18th month (sometimes sooner).

- Difficult To Disentangle:  Let's say you're using an on-line document management service and you're unhappy with it or are just tired of paying the monthly fee and want to bring your documents back in-house.  How do you get all of your documents back, how long will it take and how much will it cost?  You would obviously have very little leverage.

- You May Not Be Able To Use The Data You Get Back:  Your SaaS vendor may store your date in a proprietary structure or database.  Therefore, if you stop using the vendor and get your data back, you may not be able to do anything with it since you no longer have access to the vendor's software.  Further, you may or may not be able to import the data into another system.  Even if the vendor gives you back a non-proprietary database like SQL, do you have any idea what to do with it?  If not, you'll have to find someone to help and it's not likely to be inexpensive.

- Loss of Internet Connection Means No Access:  If all of your documents, accounting or practice management data is only accessible via an Internet connection, then what happens if the connection goes down?

- Vendor May Increase Prices:  Many SaaS vendors reserve the right to adjust prices periodically.  If they do, for the reasons outlined above, you may feel you have no choice but to pay whatever they're asking.  Here's an actual example:

"We're all for startups trying to make money, but we also recognize a good old 'bait and switch' tactic when we see one. Case in point: on-demand help desk software maker Zendesk, which has just emailed its customers to let them know they're raising their prices – resulting in a 300+ percent increase in monthly fees for some. The announcement, which was also posted on the company's forums, comes in the form of an introduction of new product features, with the new pricing scheme mentioned underneath (never a good sign). The startup claims the new pricing plans are being offered in response to 'customer requests for different packaging and features'. But judging from the commentary on the forum entry and on Twitter, we're not so sure that's really the case."

- No Offline Access: Let's say you have an on-line case management program and you're going to be traveling via airline and won't have Internet access during that time. With most cloud applications, there is no way to "download" your information so that you can access it when you don't have access to the Internet.

- Upgrades Are Forced On You: Having been in the legal tech industry for a lot of years, I can promise you that there are lot of upgrades people don't want. Whether it's case management, accounting or even a word processor, sometimes the "upgrades" introduce big changes you're not comfortable with. Furthermore, there have been plenty of examples when an upgrade breaks a feature that worked perfectly before. With cloud applications, the upgrades are performed without your knowledge or consent and you may not be happy with the result.

- Vendor Bankruptcy: Particularly in this economy, online vendors can end up in bankruptcy. What happens if a Bankruptcy Trustee now has possession of all of your important information?

- Vendor Service Disruptions: The following quote from an article by Jon Brodkin published September 10, 2011 on ARS Technical explains this risk best:

    "Outages are becoming a distressing fact of life for Microsoft's cloud e-mail customers, and users of other cloud services such as Google Apps. Two weeks of e-mail glitches plagued Exchange Online customers using Microsoft's Business Productivity Online Suite (BPOS) in May. Office 365, the successor to BPOS which launched in late June, suffered an e-mail outage in August and then again last night and this morning. Google Docs suffered an outage this week, and Amazon's Elastic Compute Cloud infrastructure-as-a-service platform was plagued by outages and

lost customer data in April and August. The latest Microsoft outage was caused by what the company vaguely called a "DNS issue" and affected not just Office 365 but also the consumer services Hotmail and SkyDrive. The outages were spread throughout the world. Taken together, the outages may put second thoughts in the minds of IT executives considering the move from locally hosted Exchange servers to Microsoft's cloud, to Google Apps or to Amazon's cloud."

- What If You Have Internet But Still Cannot Get Access? This is most easily illustrated by a recent blog post I read from C. C. Chapman (see http://tinyurl.com/zastat):

- "Yesterday I woke up in NYC and went about my day. Part of every day is checking my e-mail, calendar and other things. I do almost all of this using Google products. My phone kept saying that I had the wrong password for my e-mail which was confusing, but I just sort of shrugged and told myself that I'd check my e-mail later in the day.

- But, it kept doing it and it wasn't until I got to the train station that I was able to get on a computer and was then told by Google that my account had been temporarily disabled due to a "perceived violation of either the Google Terms of Service or product-specific Terms of Service."

- I tried going through their SMS code verification as well as every other way I could go and still nothing.

- This morning I asked about this on Twitter and someone showed me that Chris Brogan is going through the EXACT same thing.

- A hack? Something bigger broken at Google? I don't know what it is, but I just want my stuff to work. I forgot how much I rely on Google. Time to make backup plans because I'm realizing that up until now I haven't had any and that is a bad thing!"

- Bandwidth Caps: Many Internet Service Providers (ISPs) are imposing maximum GB download limitations on their customers per month. As you'll read here (http://tinyurl.com/3ny9uk4), these limitations may act to cut your access off to your cloud applications and/or force you to pay far more per month than you expected.

❶  **To Encrypt or Not to Encrypt?**

According to most jurisdictions in the United States, a lawyer does not violate the duty to preserve confidences and secrets if an email is sent without encryption technology.

In Canada, the rules do not explicitly say that encryption is not required.  Instead, the rules imply a duty to act reasonably to protect client confidences. Lawyers should consider the use of information technologies to communicate with the client in a timely and effective manner appropriate to the abilities and expectations of the client. Lawyers may use email (see Rule 3.1-1(d) and 3.1-2 of the Rules of Professional Conduct).

Lawyers must display the same care and concern for confidential matters regardless of the information technology being used.  When communicating confidential information to or about a client, lawyers should employ reasonably appropriate means to minimize the risk of disclosure or interception of data by malicious intruders.

What are the risks that a particular information technology poses for inadvertent disclosure or interception? Lawyers should inform a client of the risks of unauthorized disclosure and interception before using information technologies. Lawyers need to ensure that their clients, too, understand that they need to protect the confidentiality of communications to them. Seeking client consent before using a particular technology for communications may be appropriate.

In Ohio, Ethics Opinion 99-2, issued April 9, 1999, by contrast states that a lawyer does not violate the duty to preserve confidences and secrets if an email is sent without encryption technology citing DR 4-101 of the Ohio Code of Professional Responsibility. An attorney must use his or her professional judgment in choosing the appropriate method of each attorney-client communication.  Most jurisdictions in the U.S. are consistent with Ohio.[1]  Also see Formal Opinion No. 99-413 of the American Bar

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[1] Excerpt from Ohio Op. 99-2:

The trend among advisory bodies in other states (and the District of Columbia) is that electronic mail without **encryption** is ethically proper under most circumstances.

In the District of Columbia, "[i]n most circumstances, transmission of confidential information by unencrypted electronic mail does not per se violate the confidentiality rules of the legal profession. However, individual circumstances may require greater means of security." District of Columbia Bar, Op. 281 (1998).

In Illinois, "[l]awyers may use electronic mail services, including the Internet, without **encryption** to communicate with clients unless unusual circumstances require enhanced security measures." Illinois State Bar Ass'n, Op. 96-10 (1997).

In New York, the state bar association advised that "lawyers may in ordinary circumstances utilize unencrypted Internet **e-mail** to transmit confidential information without breaching their duties of confidentiality under Canon 4 to their clients, as the technology is in use today. Despite this general conclusion, lawyers must always act reasonably in choosing to use **e-mail** for confidential communications, as with any other means of communication. Thus, in circumstances in which a lawyer is on notice for a specific reason that a particular **e-mail** transmission is at heightened risk of interception, or where the confidential information at issue is of such an extraordinarily sensitive nature that it is reasonable to use only a means of communication that is completely under the lawyer's control, the lawyer must select a more secure means of communication than unencrypted Internet **e-mail**." New York State Bar Ass'n, Op. 709 (1998). The city bar association advised that "[a] law firm need not **encrypt** all **e-mail** communications containing confidential client information, but should advise its clients and prospective clients communicating with the firm by **e-mail** that security of communications over the Internet is not as secure as other forms of communication." Ass'n of the Bar of the City of New York, Formal Op. 1998-2 (1998).

In North Dakota, "Rule 1.6 of the North Dakota Rules of Professional Conduct is not violated by a lawyer who communicates routine matters with clients, and/or other lawyers jointly representing clients, via unencrypted electronic mail (**e-mail**) transmitted over commercial services (such as America Online or MCI Mail) or the Internet unless unusual circumstances require enhanced security measures." State Bar Ass'n of North Dakota, Op. 97-09 (1997).

In Vermont, "[a] lawyer does not violate DR 4-101 by communicating with a client by **e-mail**, including the Internet, without **encryption**." Vermont Bar Ass'n, Op. 97-5.

One state is reticent in its advice regarding unencrypted electronic communication with clients. In Arizona, the state bar responded "Maybe" to the question "Should lawyers communicate with existing clients, via **e-mail**, about confidential matters?" They advised "it is not unethical to communicate with a client via **e-mail** even if the **e-mail** is not **encrypted**" but suggested "it is preferable to protect the attorney/client communications to the extent it is practical." The committee suggested using a password known only to the lawyer or client, using **encryption** software, or at a minimum using a cautionary statement such as "confidential" and "Attorney/Client Privileged" either in the "re" line or beginning the communication. An additional suggestion was to caution clients about transmitting highly sensitive information via **e-mail** if the **e-mail** is not **encrypted** or otherwise secure from unwanted interception. Attorneys were "reminded that **e- mail** records may be discoverable." State Bar of Arizona, Op. 97-04 (1997).

Several states have reconsidered their initial views on the issue. In South Carolina, the bar association first advised that "unless certainty can be obtained regarding the confidentiality of communications via electronic media, that representation of a client, or communication with a client, via electronic media, may violate Rule 1.6, absent an express waiver by the client." South Carolina Bar, Op. 94-27 (1995). Later, the bar advised that "[t]here [now] exists a reasonable expectation of privacy when sending confidential information through electronic mail (whether direct link, commercial service, or Internet). Use of electronic mail will not affect the confidentiality of client communications under South Carolina Rule of Professional Conduct 1.6." South Carolina Bar, Op. 97-08 (1997).

In Iowa, the bar association rescinded Formal Op. 95-30 and replaced it with Formal Op. 96-1 advising that "with sensitive material to be transmitted on **E-mail** counsel must have written acknowledgment by client of the risk of violation of DR 4-101 which acknowledgment includes consent for the communication thereof on the Internet or non-secure Intranet or other forms of proprietary networks, or it must be **encrypted** or protected by password/firewall or other generally accepted equivalent security system." Iowa State Bar Ass'n, Op. 96-1 (1996). See also Iowa State Bar Ass'n Op. 96-33 (1997). Later, the bar

Association Standing Committee on Ethics and Professional Responsibility, *Protecting the Confidentiality of Unencrypted Email*, dated March 10, 1999.

The opinion contains an important caveat that should not be ignored:

> The conclusions reached in this opinion do not diminish a lawyer's obligation to consider with her client the sensitivity of the communication, the costs of its disclosure, and the relative security of the contemplated media of communication. Particularly strong protection measures are warranted to guard against the disclosure of highly sensitive matters. Those measures might include the avoidance of e-mail, just as they would warrant the avoidance of the telephone, fax and mail.

Is there a problem with this decision that is was issued so long ago? What effect do the newer Model Rules have on this opinion? Despite advances in technology, and the rules in most jurisdictions, the opinion would stand up today.

First, the same opinion is shared in well over a majority of jurisdictions, many of which had the New Model Rules already in place. Comment 17 to Rule 1.6 states:

> [17] When transmitting a communication that includes information relating to the representation of a client, the lawyer must take reasonable precautions to prevent the information from coming into the hands of unintended recipients. This duty, however, does not require that the lawyer use special security measures if the method of communication affords a reasonable expectation of privacy. **Special circumstances, however, may warrant special precautions. Factors to be considered in determining the reasonableness of the lawyer's expectation of confidentiality include the sensitivity of the information and the extent to which the privacy of the communication is protected by law or by a confidentiality agreement.** A client may require the lawyer to implement special security measures not required by this rule or may give informed consent to the use of a means of communication that would otherwise be prohibited by this rule.

The ABA accepted the same approach in Comment 16 to Model Rule 1.6.

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association amended Opinions 96-1 and 96-33 by advising that "with sensitive material to be transmitted on **e-mail** counsel must have written acknowledgment by client of the risk of violation of DR 4-101 which acknowledgement includes consent for communication thereof on the Internet or non- secure Intranet or other forms of proprietary networks to be protected as agreed between counsel and client." Iowa Bar Ass'n, Op. 97-1 (1997).

Second, email is a very efficient form of communication. Third, the same security issues exist in other forms of communication such as wiretapping phone lines or stealing U.S. mail. Fourth, any interception of email or older forms of communication such as US mail or telephone calls is illegal. Finally, there is support in case law for the proposition that a reasonable expectation of privacy may exist even though a form of communication is capable of being intercepted, citing *State v. Bidnost*, 71 Ohio St. 3d 449, 461 (1994).

Ohio accepted the same approach in Comment 19 to its rule 1.6:

[19] When transmitting a communication that includes information relating to the representation of a client, **the lawyer must take reasonable precautions to prevent the information from coming into the hands of unintended recipients**. This duty, however, does not require that the lawyer use special security measures if the method of communication affords a reasonable expectation of privacy. Special circumstances, however, may warrant special precautions. Factors to be considered in determining the reasonableness of the lawyer's expectation of confidentiality include the sensitivity of the information and the extent to which the privacy of the communication is protected by law or by a confidentiality agreement. **A client may require the lawyer to implement special security measures not required by this Rule** or may give informed consent to the use of a means of communication that would otherwise be prohibited by this Rule. Whether a lawyer may be required to take additional steps in order to comply with other law, such as state and federal laws that govern data privacy, is beyond the scope of these Rules.

## Duty to Do More? … Some Say Yes

Pennsylvania and New Jersey have adopted the same rule, but added a little more stringency to it. In Pennsylvania, Informal Opinion 97-130, issued September 26, 1997, concluded:

1. A lawyer may use e-mail to communicate with or about a client without encryption;
2. A lawyer should advise a client concerning the risks associated with the use of e-mail and obtain the client's consent either orally or in writing;
3. A lawyer should not use unencrypted e-mail to communicate information concerning the representation, the interception of which would be damaging to the client, absent the client's consent after consultation;
4. A lawyer may, but is not required to, place a notice on client e-mail warning that it is a privileged and confidential communication; and,
5. If the e-mail is about the lawyer or the lawyer's services and is intended to solicit new clients, it is lawyer advertising similar to targeted, direct mail and is subject to the same restrictions under the Rules of Professional Conduct.

**While other jurisdictions are not bound by rules 1 through 5, above, I recommend them as best practices to follow.**

The New Jersey Advisory Committee on Professional Ethics, in Opinion 701, issued in April 2006, states in a footnote that <u>confidential documents</u> sent over the Internet should be password protected.

In conclusion, in light of evolving technology and rules, it is my recommendation that attorneys (1) should advise clients verbally and in their engagement letter about email, as described in the Pennsylvania opinion, and (2) should have encryption available for use in appropriate circumstances.

❷  **Email Encryption Solutions**

Office 365 w/hosted Exchange and E3 licensing
[www.office.com](www.office.com)

Protected Trust
[www.protectedtrust.com](www.protectedtrust.com)

Mail It Safe
[www.mailitsafe.com](www.mailitsafe.com)

AppRiver
[http://www.appriver.com/services/email-encryption/](http://www.appriver.com/services/email-encryption/)

Send
[www.sendinc.com](www.sendinc.com)

TrendMicro
[http://www.trendmicro.com/us/enterprise/network-web-messaging-security/email-encryption/index.html](http://www.trendmicro.com/us/enterprise/network-web-messaging-security/email-encryption/index.html)

❸  **Retracting Sent E-Mails**

Are there times when you wish that you could UNSEND something?  This is actually something that <u>can</u> be done to <u>prevent</u> a known ethical violation where it may not be possible with ordinary U.S. Mail.  With U.S. Mail, once the mail is in the post box, good luck getting it back!

I have 2 suggestions in this regard:

- If your firm uses Exchange Server, be sure to tell your system administrator to set a 5 minute delay before the email is actually sent from your server.  This may give a user in your office enough time to catch it before it goes out.

- You may want to try out something like www.mailitsafe.com, or similar functioning service, which is an email verification program, but also allows retraction so long as it hasn't been retrieved by the recipient.  You can also encrypt emails and attachments, requiring recipients to use passwords to open.  The cost is $150 per year.

❹  **E-Mail Addressing: AutoComplete can be an AutoDisaster**

Outlook and other popular email programs have an "Auto-Complete" function that saves you the time of having to type out someone's complete email address if the name already exists in the program's address book.  Once you type the first character in the TO field, Outlook starts guessing the name of the recipient and will display potential names.  If to quick and careless, you could accidentally hit ENTER and auto-complete the wrong recipient.  While a nifty feature if used correctly, this can get you into trouble if you are careless.

As an example, if you intend to send something to your client "Brian Cluxton", you could accidentally send something to opposing counsel "Brian Clayton" by typing B-R-I and hitting ENTER too quickly.  If you don't catch it, you could send something really damaging to the wrong person.  I don't think this warrants disabling the feature … just be careful!

You just hit the SEND button.  You start to sweat and suddenly experience a panic attack.  You and your associate were revising a contract for a client.  Before sending it on to your client, you forgot to accept or reject tracked changes and remove all the hidden text from the word processing document.  You also forgot to remove any other "metadata" before sending it.  Anyone who receives the file can easily find out the following information:

- All the people who authored any part of the document … including the original author who happens to be a managing partner at a competing law firm

- The hidden text that states the client "is a moron!"

- The suggested changes made by a 1st year associate in your office (half of which were a bit moronic)

- The total time you spent revising the document … 15 minutes (even though you billed the client 8 hours – which is a big ethical problem of its own!)

This story is not fictional.  It actually happened.  This is just one of many bad messes that you can get yourself into if you are not using technology correctly.

The Bad News … Say goodbye to the glory days when you could simply draft and send a word processing document to opposing counsel or your client.

The Good News … Most technology-created pitfalls are easily avoidable if reasonable steps are taken.

## Metadata  … Is it really a "Nightmare"?

**What is Metadata?**  Literally, metadata means "data about data."  In the personal & business computing world, it is the hidden or invisible information contained within computer files.  Most notably in the legal technology field, lawyers worry about metadata found in Microsoft Word, PowerPoint, Excel, Corel WordPerfect and Adobe Acrobat files.

The kind of information that can be found under the surface a Word document, for example, might be:

- Last 10 authors
- Firm name
- File locations

- Tracked changes
- Hidden text
- Deleted document comments
- Routing slip information
- Document versions
- Revision time
- Document properties (file size, modification date, etc.)
- Fast saves
- Hyperlinks
- Linked objects

As an example, below is part of a report showing metadata using a widely-used metadata remover called "Metadata Assistant" created Payne Consulting Group.
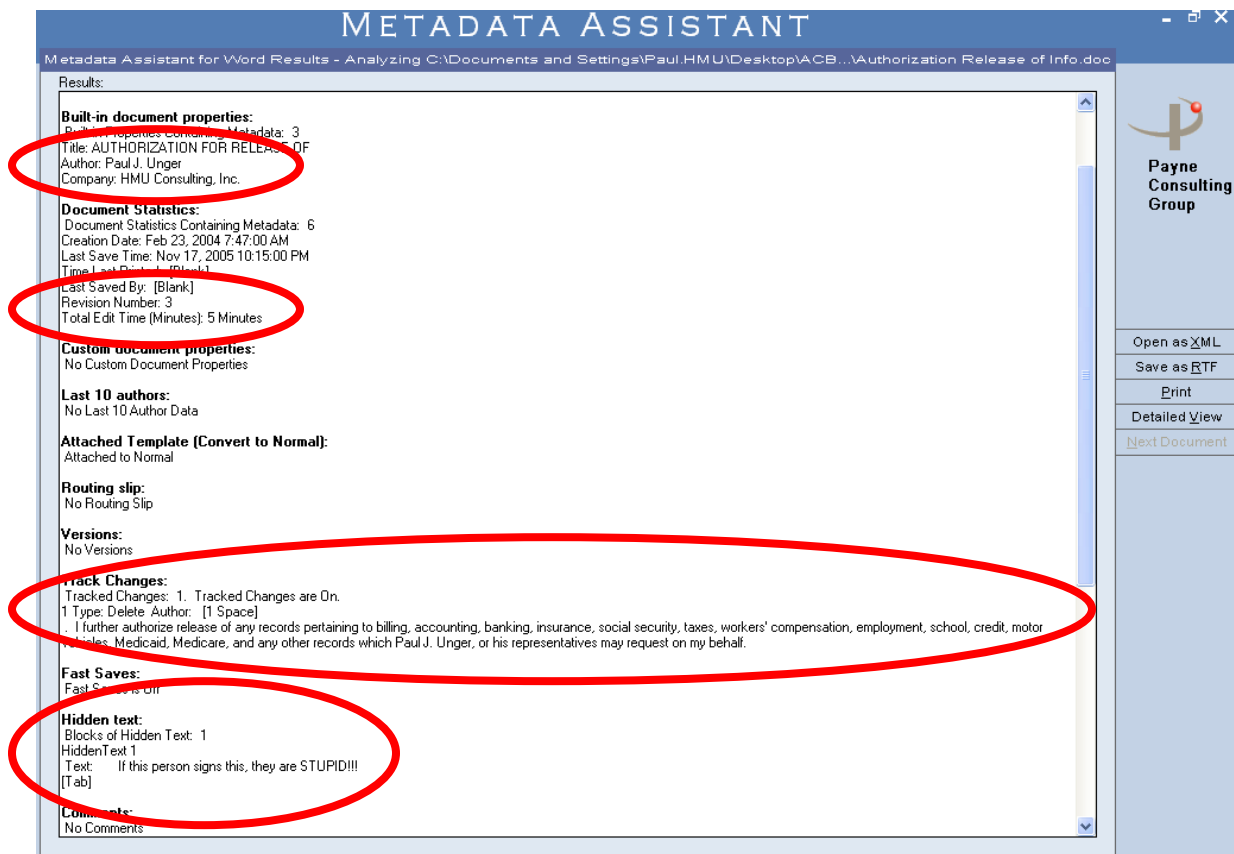


Why have metadata if it is so bad?  Well, quite frankly because it is really useful information and it was never intended to be bad.   Microsoft designed its programs to store metadata for a variety of reasons, one of which was for document management before Document Management Systems (DMS) existed.

As a very simple example, if one wanted to find all documents created or modified between December 1, 2005 and December 31, 2005 as a way to verify that you created

timesheets for all your billable time in December, you would perform a search using a Microsoft Find Files or Folders utility or a third-party program like dtSearch that searches … yes … metadata.

If you exchange electronic word processing files with anyone outside your office and do nothing to remove metadata it can result in a nightmare <u>if the file contains metadata that was intended to be confidential</u>.  So, yes, it can indeed be a nightmare as many legal technologists claim.  However, if you are not careless, these problems are not a nightmare at all.  You just need to know what to do.  Below is a list of what you need to do to avoid the word processing so-called "metadata nightmare."

❶  **Learn the Security Settings within Microsoft Word**

Much of the "dangerous" metadata contained in Microsoft Word documents can be prevented from transmission if certain security features are turned on.

In Word 2003 and earlier, open Word and select **Tools** and then **Options** and select the **Security** tab:

- Check "Remove personal information from file properties on save"

- Check "Warn before printing, saving or sending a file that contains tracked changes or comments"

- Check "Make hidden markup visible when opening or saving"
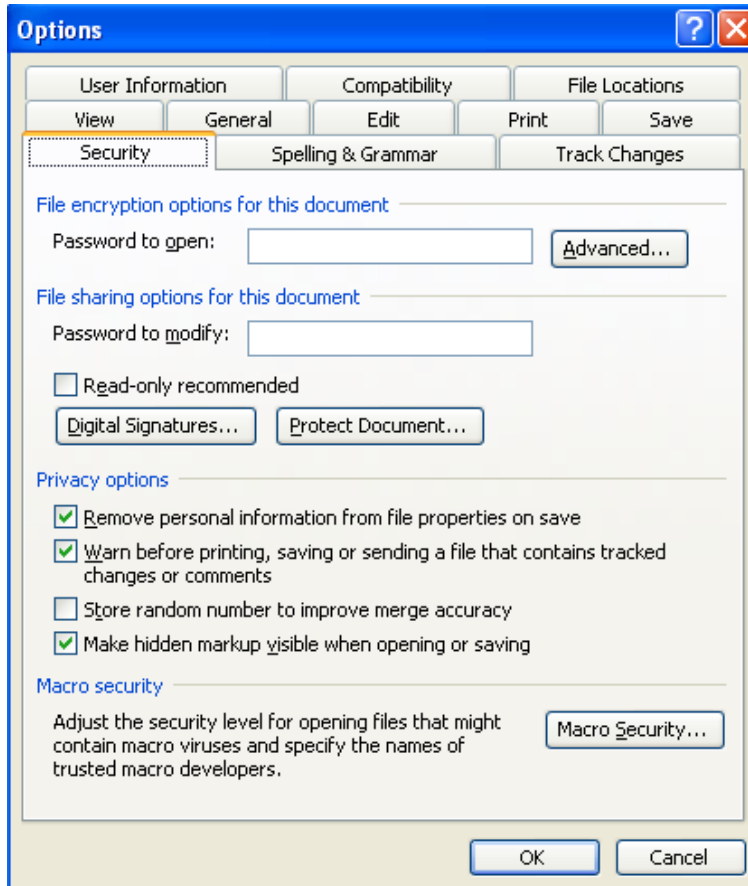
In Word 2010 and later, you must run the document inspector, which is most easiest found at **File > Info > Check for Issues > Document Inspector.**

You may want to have Word warn you if there are tracked changes comments on save, print or send commands. It is found under **File** and then **Options**, **Trust Center**, **Trust Center Settings**, and then **Privacy Settings**.
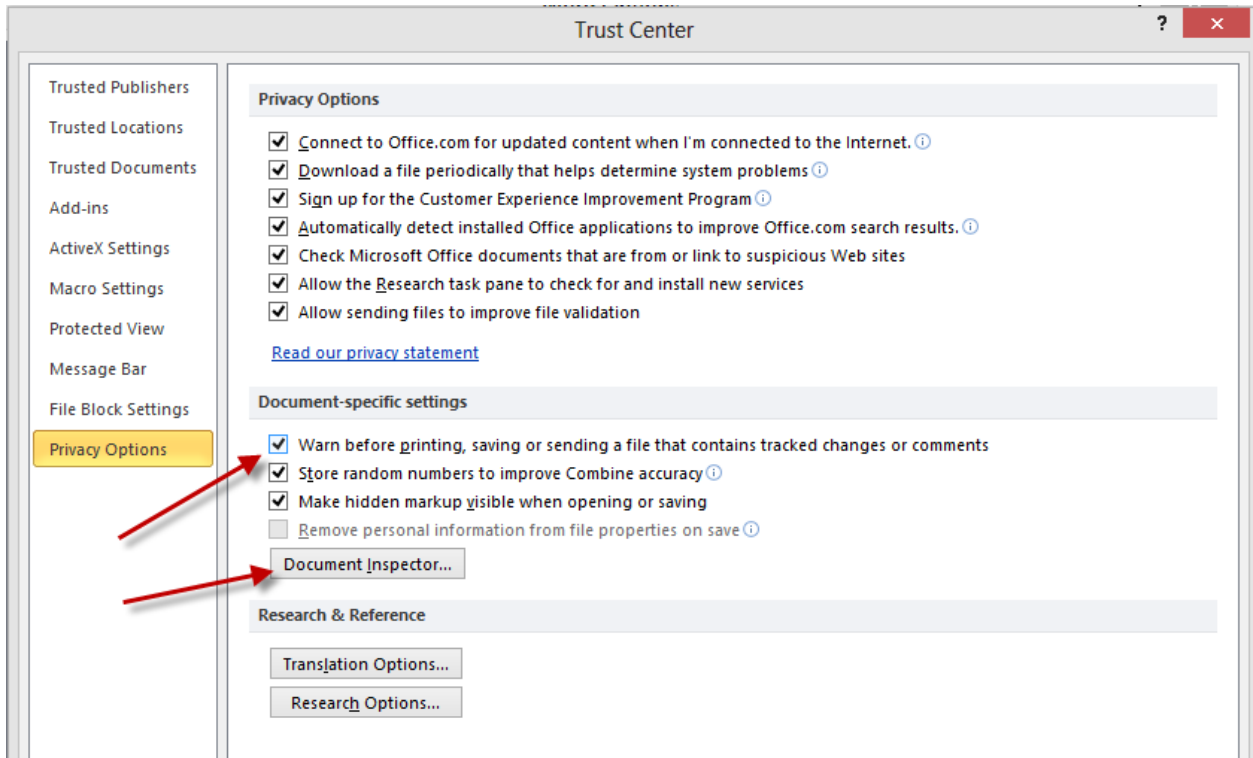


You can also download and install a free add-in from Microsoft - Office 2003/XP Add-in: Remove Hidden Data. CAUTION: This will not remove all metadata. Metadata still exists. The question is whether it is benign or damaging metadata.

❷  **Learn About Tracked Changes in Word**

"Track Changes" is a fantastic feature available in Microsoft Word that allows multiple reviewers of a document to literally track changes or compare documents electronically to see what edits have been made to a document. My first suggestion is to start using it if you have the need for that type of feature. My second suggestion is to learn how to use it correctly so those internally tracked changes do not end up in the hands of opposing counsel or even your own client. Here is an example of a paragraph that has tracked changed turned on.

"Track Changes" is a fantastic feature available in Microsoft Word that allows multiple reviewers of a document to literally track changes or compare documents electronically to see what edits have been made to a document. My first suggestion is to start using it if you have the need for that type of feature. My second suggestion is to learn how to use it correctly so those internally tracked changes do not end up in the hands of opposing counsel or even your own client so you don't look like a freaking idiot. Here is an example of a paragraph that has tracked changed turned on.

Added Text & Deleted Text

💣 The first big mistake that people make is not accepting or rejecting all changes before sending the document on to opposing counsel for their review. It is imperative that you go through the entire document and accept or reject all the changes made in the document. Changes that were made between versions that are not **accepted** or **rejected** will show up in a metadata analysis. This may expose your thought process or a weakness that you knew about, but the other side didn't think of … at least until now!

💣 The second critical thing that you do is make sure that you can see the tracked changes (the marked up or redlined version). Be sure that you select **Final Showing Markup** in the reviewing toolbar. Otherwise, you may not even realize that there are tracked changes in the document. Also remember in the security settings (discussed above) there is an option that will warn you before printing, saving or sending a document that has tracked changes.
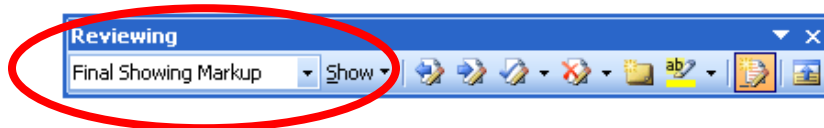
❸ **Consider a Third-Party Meta Data Removal Tool**

Another option which I generally favor is investing in a metadata removal tool. These are programs that strip the metadata out of electronic documents before you send it to another party. You can either run the cleaner manually on a document OR intercept, evaluate and clean all attached documents when you are emailing it to the outside world. This makes the process much easier and requires no working knowledge of how tracked changes work or security settings within the program. As an example, Donna Payne's Metadata Assistant intercepts attachments with this dialog box when you hit the **Send** key from Outlook's email:
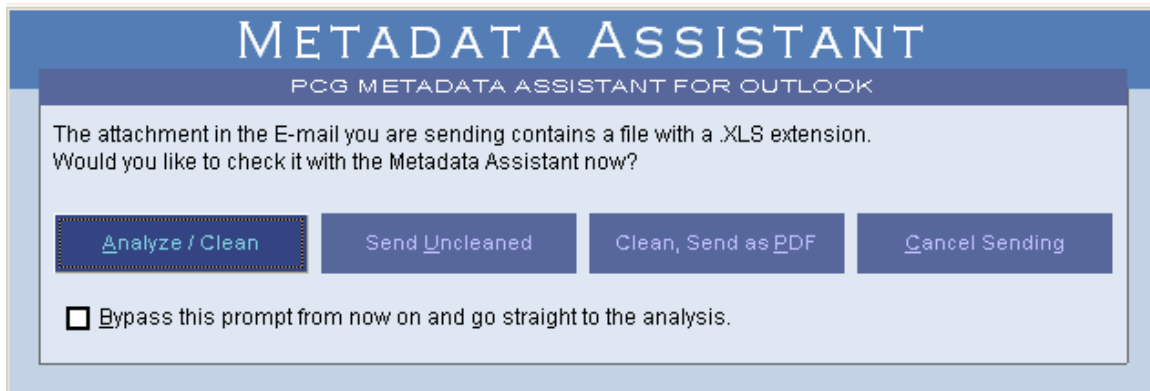


I suggest a metadata remover for those people who actually exchange electronic documents containing potentially harmful metadata. Many attorneys don't do this. If you do not exchange documents, don't spend the money.

Metadata removal tools to consider:

- Metadata Assistant (Payne Consulting Group – www.payneconsulting.com). Cost is $79 per license.

- CleanDocs (www.cleandocs.com)

- Workshare Protect (www.workshare.com). Cost is $29.95 per year.

- iScrub by Esquire Innovations (www.esqinc.com).

- Out-of-Sight by SoftWise (www.softwise.net). Cost is $30 per user.

- ezClean by KKL Software (www.kklsoftware.com). You must buy at least 20 licenses at $20 per license.

❹ **Exchange PDF Documents**

Although PDF documents do contain some metadata, they do not contain as much. Tracked changes <u>can indeed</u> be passed on from a Word document to PDF, but you would have to do it one of two ways.  First, the person converting the document would have to attach the Word file into the PDF in its native format (Acrobat allows you to attach files into a PDF document).  While possible, I know of no one who uses that function.  So…just don't do it that way.  A second way is if you have the tracked changes visible when you convert to PDF.  That would create a PDF with the tracked changes <u>blatantly</u> showing.  <u>You would have to be blind or extremely careless</u> not to see the tracked changes in the Word document and the resulting PDF.  Also, if you have your printing configuration in Word set to print 'tracked changes' along with the document.  In this instance, again, you would have to be blind and 100% careless by failing to review the newly created PDF before sending it.

Another benefit sending a PDF is that PDF documents are less editable, especially if you have security turned on.  This has less to do with metadata, but it is a nice benefit if you send a PDF to a client, for instance, and tell them to print and sign the attached.  If the document is editable, the client could change the text using Adobe Acrobat and then sign it (and not tell you).  If the PDF document is secure, the signing party would have to go to greater lengths to make a deceptive change that is not noticeable.

❺ **WordPerfect also contains Meta Data**

Contrary to popular belief, WordPerfect also contains metadata.  Examples of metadata stored in WordPerfect documents include:

- Authors
- Tracked changes
- Comments and hidden text
- Document revision annotations
- Undo/Redo history
- User names, initials and company
- Document summary information
- Header/Footer information
- Hyperlinks

*See Minimizing Metadata in WordPerfect 12 Documents,* Corel Corporation, copyright 2004.

Like Microsoft, Corel also made available a metadata removal tool which is available on their website.  Also check WordPerfect Universe (www.wpuniverse) which offers a metadata removal tool for WordPerfect.

## Keeping Information Safe from
## Disaster, Accidental Loss, Theft, Viruses and Malicious Intruders

ABA Model Rule 1.6 also imposes a duty upon attorneys to keep their technology in safe and working order to protect client information.  Similarly, in Canada, Section 3.3 of the Rules of Professional Conduct requires competence and confidentiality.

As an example, section 5.7 of the Law Society of Upper Canada's Technology Practice Management Guidelines states:

**5.7 Confidentiality**

Lawyers using electronic means of communications shall ensure that they comply with the legal requirements of confidentiality or privilege. (Section 3.3 of the Rules of Professional Conduct).

When using electronic means to communicate in confidence with clients or to transmit confidential messages regarding a client, a lawyer should

- develop and maintain an awareness of how to minimize the risks of disclosure, discovery or interception of such communications
- discuss the inherent security risks associated with each technology with the client and confirm in writing that the client wishes to communicate using that method
- use firewalls and security software to protect at-risk electronic information
- use and advise clients to use encryption software to assist in maintaining confidentiality and privilege
- take appropriate measures to secure confidential information when using cloud-based services
- develop and maintain law office management practices that offer reasonable protection against inadvertent discovery or disclosure of electronically transmitted confidential messages.

**ABA Model Rule 1.6(a) states:**

(a) A lawyer shall not reveal information relating to the representation of a client, including information protected by the attorney-client privilege under applicable law, unless the client gives informed consent, the disclosure is impliedly authorized in order to carry out the representation, or the disclosure is permitted by division (b) or required by division (c) of this rule.

**Comment 16 further states:**

Acting Competently to Preserve Confidentiality [16] A lawyer must act competently to safeguard information relating to the representation of a client against inadvertent or unauthorized disclosure by the lawyer or other persons who are participating in the representation of the client or who are subject to the lawyer's supervision.  See Rules 1.1, 5.1, and 5.3.

The State Bar of Arizona issued an opinion in response to an inquiry about the steps a law firm must take to safeguard data from hackers and viruses.  They stated:

> ER's 1.6 and 1.1 require that an attorney act competently to safeguard client information and confidences. It is not unethical to store such electronic information on computer systems whether or not those same systems are used to connect to the internet. However, to comply with these ethical rules as they relate to the client's electronic files or communications, **an attorney or law firm is obligated to take competent and reasonable steps to as-sure that the client's confidences are not disclosed to third parties through theft or inadvertence.**  In addition, an attorney or law firm is obligated to take reasonable and competent steps to assure that the client's electronic information **is not lost or destroyed.** In order to do that, an attorney must either have the competence to evaluate the nature of the potential threat to the client's electronic files and to evaluate and deploy appropriate computer hardware and software to accomplish that end, or if the attorney lacks or cannot reasonably obtain that competence, to retain an expert consultant who does have such competence. (Emphasis added.)

State Bar of Arizona, Opinion No 05-04, July, 2005.

The ABA Standing Committee on Ethics and Professional Responsibility has stated something similarly.  In Opinion 95-398, they concluded "[a] lawyer who gives a computer maintenance company access to information in client files must make reasonable efforts to ensure that the company has in place, or will establish, reasonable procedures to protect the confidentiality of the client information."

In 2006, Nevada spoke to a similar issue relating to offsite storage of data and reached a consistent conclusion.  They stated that a lawyer may store confidential information electronically with a third party to the same extent and subject to the same standards as storing confidential paper in a third party warehouse. In doing so, the lawyer must act" competently and reasonably to ensure the confidentiality of the information.  Opinion 33 (February 9, 2006), Nevada Standing Commission on Ethics and Professional Responsibility.

David Reis, a partner with Thorp, Reed & Armstrong, LLP in Pittsburgh, PA, and a colleague legal technologist suggests the following basic steps:

1. Keep your operating systems patched.

2. Install and use anti-virus and spyware protection on all computers (and keep them all current with updates).

3. Use Care with Email attachments and Embedded Links.

4. Make backups of important files and folders.

5. Use strong passwords or other authentication (combine numbers and characters).

6. Use care when downloading and installing programs.

7. Install and use a hardware firewall.

8. Install and use a file encryption program.

Additionally, I recommend:

1. Apply the above principles to laptops and PCs that are used at home for business purposes.

2. Have a secondary backup system (consider an online backup service like Iron Mountain, MozyPro or Carbonite).

3. Encrypt laptops and external hard drives or flash drives where you store or transfer client information.

4. Use Adobe Acrobat Pro (or similar competing products like Kofax PowerPDF Advanced, pdfDocs, etc.) to redact important client information (social security numbers, billing information, etc.) contained in documents that you may have to file with the court electronically.

You just got all new workstations for your staff.  What do you do with the old workstations?  What about all the confidential information contained on the hard drives?  If you think that you deleted the information, think again!  You may be violating Model Rule 1.6, HIPAA and opening yourself up to liability.

According to a study performed at the Massachusetts Institute of Technology (MIT), two graduate students scavenged through the data inadvertently left on 158 used disk drives.  They found more than 5,000 credit card numbers, detailed personal and corporate financial records, numerous medical records, gigabytes of personal email and pornography.  The disk drives were purchased for less than $1,000 from eBay and other sources of used computer hardware. Only 12 were properly sanitized (http://web.mit.edu/newsoffice/2003/diskdrives.html) .

❶　Avoiding the Ethical Pitfall – What is Required?

An attorney must act reasonably to preserve confidences and secrets of his/her client.  The rules in the U.S. and Canada impose the same duty.  ABA Rule 1.6 (and old rule DR 4-101) imposes a duty to preserve confidences and secrets.  In all likelihood, disposing of employee workstations was not contemplated when DR 4-101 was adopted by the Supreme Court of Ohio on October 5, 1970 and likewise in other jurisdiction following suit; nevertheless, the rule applies. The New Rule as written, establishes a broad duty to preserve confidences and secrets that applies to all methods of communication.  The duty clearly extends to disposing of client information and communication.

What does this mean in practical terms?  Reasonableness, in my opinion, requires one of the following:

(A) Retain the hard drive(s) of the computer(s) for safe keeping; or
(B) Hire a company to erase and reformat the hard drives[2]; or
(C) Hire a company that uses a special data erasing program; or
(D) Purchase and utilize a special data erasing program.  Using data erasing/rewriting programs to mask data stored on the hard drive is much more effective than just deleting it.  This is a time-consuming process.  Most of these programs claim they delete data to Department of Defense (DOD) level data

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[2] Erasing and reformatting hard drives will not completely protect the data.  A skilled computer technician or forensic expert can likely recover some (not all) data from that hard drive using specialized software.  This process is time-consuming and expensive.

destruction specifications (DOD sanitizing standard 5220.22-M).  These programs delete the data and then rewrites data to the hard drive using a series of meaningless information in binary code patterns of "ones" and "zeros."  These programs perform this function multiple times.  Using very expensive technology, someone really talented could read something on a disk several rewrites deep, but it is unlikely and extremely costly.

❷  **Use a Service like PCDisposal ([www.pcdisposal.com](http://www.pcdisposal.com))**

PCDispoal is probably the largest computer disposal service in the country.  It handles more than 10,000 computers per week thrown out by the U.S. Government.  They will pick up your units (or have them shipped), properly delete data, provide a certified report detailing  the services performed and confirming software removal (listed by hardware serial number)(Services are HIPAA compliant), and if possible, refurbish computers and may resell to companies looking for a bargain, sharing profits with you.  They offer free shipping if it is over 10 units.

Contact Information:
Telephone: Toll Free 1-877-244-0250
FAX: (509) 562-4323
Postal address: 900 E. Loula, Olathe, Kansas 66062
E-mail: isales@pcdisposal.com

Also check out:

[www.retire-IT.com](http://www.retire-IT.com) (nationwide service)

[http://www.ohiodropoff.com](http://www.ohiodropoff.com) (Ohio Computer and Recycling Center)

**IMPORTANT:  Most computer recycling companies will not delete data or reformat hard drives.  Make sure that you specifically request this, or it will <u>not</u> be done.**

❸ **Do-It-Yourself**

You could do the DOD-level data destruction yourself with programs like the ones listed below, OR simply take out your screwdriver and physically remove the hard drive and throw it in a locked file cabinet.  Programs that you can buy to erase data yourself are:

- cyberCide Data Destruction ([www.cyberscrub.com](http://www.cyberscrub.com)) offers a product for $29.00.

- Active@ Kill Disk - Hard Drive Eraser ([www.killdisk.com/eraser.htm](http://www.killdisk.com/eraser.htm)) offers a free version and a professional version for about $30.

- OnTrack DataEraser™ ([www.ontrack.com](http://www.ontrack.com)) offers a personal version for $29.

**IMPORTANT NOTE**:  If trying to **sanitize data on a solid state drive (SSD)** (most hard drives after 2013), I recommend that you use Parted Magic ([www.partedmagic.com](http://www.partedmagic.com)), or rely on an expert to do it for you and provide written certification.  The above tools will not work on SSDs.

❹ **Don't Forget SmartPhones, Tablets, and <u>Copy Machines</u>!!**

Be sure to follow manufacturer's instructions on wiping all data from smartphones and tablets.

Copy machines are the most often forgotten about devices that contain an enormous amount of potentially confidential client information.  Copy machines just don't copy anymore.  They first take a snapshot image of the document, stores it on a hard drive, and then prints a copy per your instructions.  Depending on the size of the hard drive and the volume you scan, your machine can hold days, weeks, months, and potentially years of "copied" documents.

CBS did an excellent story on copy machines that is quite alarming: [http://www.youtube.com/watch?v=iC38D5am7go](http://www.youtube.com/watch?v=iC38D5am7go)

In short, passwords need to be (1) unique; (2) strong; and (3) stored safely. With as many passwords that we maintain, personally and professionally, there are some very inexpensive, but fantastic solutions that can provide you with relief.

❶ **Two-Factor Authentication is Critical**

Putting in place two-factor (or multi-factor) authentication (also known as 2FA) is more important today than changing passwords or using unique passwords. I still think unique passwords is important, but changing passwords every 30 days has recently been regarded as a waste of time. 2FA is more important because without the second method of authentication (usually a text message notification requiring your intervention, like entering a code, providing a PIN, proving your fingerprint from your smartphone) a cybercriminal will not be able to login to an important account even if they have your password. See this regarding Microsoft finally acknowledging this year that 2FA is critical and changing passwords is not very important anymore: https://www.cnet.com/news/microsoft-admits-expiring-password-rules-are-useless/.

❷ **Make Passwords Strong <u>and</u> Unique**

Passwords should not be re-used. If your credentials are compromised, they could be sold on the dark web. If you used the same password at another site (i.e. Dropbox, a client portal, your bank, etc.) your information (potential confidential information or documents) is now compromised. Moreover, most cybersecurity experts now advise people to use long phrases that combine letters, numbers and characters. I generally aim for at least 12 characters.

❸ **Safely Store your Passwords**

If you don't have a password manager, I recommend saving your passwords in an encrypted Word or Excel file (see above how to encrypt Word & Excel files).

❹ **Password Management Programs**

I strongly recommend investing in a password manager. In fact, I believe in this technology so much, that our company now provides a password manager to every employee in our organization. The good news is that the above 3 objectives can be

achieved with some very inexpensive solutions.  Here are some of the common features:

- Automatic password generators for unique passwords that never repeat
- Automatic password generators that create insanely strong & cryptic passwords
- Cloud encrypted storage of passwords
- Access to passwords from all mobile and desktop devices
- Integration with all major browsers
- Works on a Mac or PC
- Apps for iPhone, Android-based phones, iPads, Android tablets
- Safe storage of financial and estate information
- Ability to share with loved ones or individuals at work

**Highly Rated Password Managers**

1. **Dashlane** ([www.Dashlane.com](www.Dashlane.com))
2. **LastPass** ([www.LastPass.com](www.LastPass.com))
3. **1Password** ([www.1password.com](www.1password.com))
4. **Roboform** ([www.roboform.com](www.roboform.com))
5. **Keeper** ([www.keepersecurity.com](www.keepersecurity.com))

**Date:** _____

# PRIORITIES ♦

**1**

**2**

**3**

**4**

**5**

# GRATEFUL THOUGHTS ☺

1. _____

2. _____

3. _____

# TODAY'S TIME BLOCKING

**6:00**

**7:00**

**8:00**

**9:00**

**10:00**

**11:00**

**12:00**

**1:00**

**2:00**

**3:00**

**4:00**

**5:00**

**6:00**

## NOTES