The need to deal with passwords and digital property at death is coming at us faster than we may think.

According to recent surveys in the United States by the Pew Internet & American Life Project, three-fourths of adults use the Internet—most buy things online and do some of their banking on the Internet. But, since 2005, it’s the people aged 70 and older who’ve increased their use of the Internet more than any other age group surveyed.

Ideally, then, advisors will help clients prepare a written or electronic list of accounts, passwords, and other information about their digital lives to ensure a smooth and efficient process in the event of incapacity or death.

If this has not been done and someone has died or become incapacitated, here are the main categories of digital property in today’s world, along with suggestions on how to locate and access them—as well as how to prioritize which digital property needs urgent attention.

With other, traditional forms of property (real estate, stocks and bonds, bank accounts, life insurance, vehicles, personal property, etc.), there are well-established procedures and processes to locate it, identify value, and transfer control or ownership. But there are significant differences with digital property, especially with Internet accounts and encrypted electronic data. Indeed, failure to plan can make it practically impossible to locate and access certain types of digital property.

So, let’s get started.

What Is It?

Digital property includes data, Internet accounts, and other rights in the digital world, including contractual rights and intellectual property rights.

Data are the files and information stored and used by computers (such as e-mails, word processing documents, spreadsheets, pictures, audio files, and movies). This data may be stored locally on a computer’s hard drive or on removable media, or data may be stored remotely and accessed over the Internet.

Internet accounts are governed by contracts between an individual and a service provider, such as e-mail accounts, accounts at financial institutions, accounts on shopping Web sites, Web page or blog hosting accounts, social networking accounts, registered domain names, and online video game and virtual world accounts.

Intellectual property (IP) rights also can exist in digital property, such as pictures, music, movies, literary works, Web pages, computer code, and other creative works.

When family members, fiduciaries, and advisors begin to deal with an individual’s incapacity or death, they traditionally start by reading the individual’s mail and sorting through the records at the person’s home, including the checkbook register, bank and brokerage account statements, credit card bills, utility bills, medical bills, loan statements, tax returns, and similar documents.

But today, many bills can arrive by e-mail and be paid online or by telephone. Intuit’s Quicken software and Microsoft’s Money software can replace a paper checkbook and track other financial records. And these software packages are rapidly being replaced by personal finance Web sites like Mint.com. Banks also offer these features on their Web sites.

Tax returns can be filed electronically. File cabinets with paper records can be replaced by scanning documents into a computer for storage. The paper trails we rely upon to reconstruct an individual’s financial world are moving into the digital world, and locating and accessing this information may be necessary to deal with incapacity or death.

In the best-case scenario, the individual has planned ahead and provided a list of accounts, passwords, and other key information about the individual’s digital property. So, our first step must be to look for a written list. Many people keep passwords scribbled on sticky notes plastered on the
computer. Of course, it’s far better to keep a written list in a sealed envelope stored along with an individual’s power of attorney, health care directive, will, and other important papers. But even a sealed envelope creates a security and privacy risk. So also look for a written list in a safe deposit box or in the file of the individual’s attorney or other key advisors. The main drawback of a written list, especially if kept in a safe deposit box or advisor’s file, is that it is more difficult to update and keep current.

An individual also can keep track of accounts and passwords electronically by using software on a computer, smartphone, or PDA or by using a service on the Internet. With an electronic list, a single password can unlock a database of accounts, passwords, and other key information. From a planning perspective, an electronic list is more secure and more likely to be kept current than a written list. As an added convenience, some software programs can automatically enter the user name and password for Internet accounts, which makes using separate, secure passwords for each Internet account almost effortless. In an August 2008 survey, the most popular computer software password managers were KeePass, 1Password, RoboForm, LastPass, and PasswordSafe.1 There are also Internet-based services that manage accounts and passwords, such as Clipperz and PassPack.2

New Internet-based services (such as AssetLock, Legacy Locker, and Deathswitch) are designed specifically for passing on a list of accounts, passwords, locations of key documents, final wishes, and messages to family members and friends upon incapacity or death.3 AssetLock also can store electronic copies of a power of attorney, health care directive, will, trust, deed, insurance policy, and other important documents. For AssetLock and Legacy Locker, the individual selects key people who can unlock this information at the appropriate time. Deathswitch takes a proactive approach—they contact the individual on a regular basis to make sure the individual is still alive and not incapacitated, and, if there is no response within the prearranged time limit, they send an automatic e-mail message with the individual’s important information to designated family members, fiduciaries, and advisors.

If the individual has not provided a list of all the accounts, passwords, and other key information about digital property, dealing with the individual’s incapacity or death becomes more difficult. Locating and accessing the individual’s computer, data storage, and e-mail accounts are the next steps, and the information they contain may unlock the doors to the individual’s other data and Internet accounts.

Computers, Data Storage

Generally, locating an individual’s home or office computer is not a difficult task, and it is a good starting point for finding the data and online account information. If the person does not own a computer, he may use a shared computer at an apartment building, assisted living facility or nursing home, public library, or local Internet café. The next step is locating where the individual’s data is stored.

A computer’s internal and external hard disk drives are the first places to look for data and information about Internet accounts. Removable media and remote storage accessed over the Internet are just as important to locate but can be much more difficult to find. Look for CDs, DVDs, flash memory cards and drives, floppy disks, tapes, and other removable media stored near the individual’s computer. Also look for removable media stored in a safe or safe deposit box. One challenge in locating removable media is that it keeps getting smaller with advances in technology. Currently, the smallest removable media by physical size is a microSD card measuring one millimeter thick and less than one-third of the size of a U.S. first-class postage stamp.5 Remote storage over the Internet, on the other hand, has no physical presence in the individual’s home. Remote storage may be practically impossible to find unless the name of the service provider is known and the individual’s account name and password are known. Three of the most popular free remote storage services are MediaFire, Microsoft’s Windows Live SkyDrive, and Box.net.6

These remote storage services are typically used for disaster-proof backups or as a primary storage location for people who travel frequently or use multiple computers. If a person’s hard drive is encrypted and not accessible, look for backups locally or remotely that might not be encrypted.

After the data is located, the next challenge is accessing it. Computers and data may be protected with power-on passwords, user account passwords, encrypted storage devices, and password-protected or encrypted data files. These protection methods can prevent family members, fiduciaries, and advisors from easily accessing the computer or the data. Elcomsoft and other companies sell software programs that attempt to access password-protected Quicken data, unlock encrypted data files and archives, and reveal passwords for Internet accounts.
previously accessed from an individual’s computer. A computer consultant who specializes in data recovery or computer forensics can identify which protection methods can be bypassed and which are practically impossible to circumvent.

**E-Mail Accounts**

Gaining access to an individual’s e-mail account can be the gateway to accessing the individual’s other online accounts and important information. An e-mail account and e-mail address book can hold contact information for family members and friends, and it can be a convenient way to inform them of an individual’s incapacity or death. The individual’s e-mail account may have information about other Internet accounts the individual has, and the e-mail account can be the key to unlocking those.

Most Internet accounts have a system for recovering a lost password, and these systems often work by sending to the individual’s primary e-mail account the lost password, a hint for remembering the lost password, or a link to click that will reset the password.

In addition, because many bills can now be delivered by e-mail instead of by regular mail, it’s important to check e-mail accounts early and often for billing statements.

Finally, an e-mail account may contain correspondence that has personal value to family members and friends, even if it does not have any financial value.

An individual may have multiple e-mail accounts through his Internet service provider (for example, a cable company, phone company, etc.), an employer, or an Internet service. These accounts are usually easy to identify by talking to family members and friends who corresponded with the individual. But the password to access the account can be difficult to recover.

Generally, for an e-mail account obtained through the individual’s Internet service provider, a phone call from the appropriate family member or fiduciary should be all that is needed to reset the password to the e-mail account. The individual’s employer may allow family members or fiduciaries access to e-mails in the individual’s account, but that employer may claim ownership of e-mails stored on their servers and may not grant full access because of privacy or security concerns for the business.

Access to an individual’s e-mails from a free online e-mail account may be significantly more difficult to obtain without the password. The three most popular free online e-mail services are Microsoft’s Windows Live Hotmail, Yahoo! Mail, and Google’s Gmail. If the password is known, it’s important to access free online e-mails accounts within a short time after the individual’s incapacity or death because each of these services deletes the e-mails if the account is not accessed for four to nine months and deletes the account if it is not accessed for eight to twelve months.

If the password is lost, Microsoft’s policy is not to reset the e-mail account password or grant access to a decedent’s account, but the company will provide the contents of the account on a CD after being provided appropriate documentation of the individual’s death.

Google also will allow access to the contents of a decedent’s e-mail account on its Gmail service after being supplied appropriate documentation.

But, take note, Yahoo! will not allow access to a decedent’s e-mail account without a court order, citing privacy reasons. In a 2005 case that attracted national attention, Yahoo! honored a Michigan probate court’s order to turn over e-mails from the account of a deceased Marine killed in Iraq. A detailed discussion of the copyright and property law issues regarding e-mail can be found in the Winter 2007 issue of New York University’s *Journal of Legislation and Public Policy*.

After an individual dies, at some point the e-mail account must be closed. An e-mail account through an Internet service provider typically lasts as long as the Internet service is continued. An employer will likely close an employee’s e-mail account shortly after death or other termination of employment. The contracts governing Microsoft’s Windows Live Hotmail, Yahoo! Mail, and Google’s Gmail indicate that these free online e-mail accounts are non-transferable, so the accounts cannot be left to family members or friends.

If the e-mail account can be accessed, it can be used to notify family members, friends, and others that the account is being closed and provide new contact information for the family members or fiduciaries. Before closing the account, it is also important to identify bills and other communications that are being delivered by e-mail only and to change the delivery method to regular mail or to another e-mail account.
Finally, make sure to change the e-mail address that is listed on the individual’s other Internet accounts—or close accounts that reference the e-mail address that will be closed—to prevent fraud or unauthorized access to those accounts.

**Financial Info and Accounts**

The next step in dealing with an individual’s incapacity or death is to locate information about the person’s financial world. In the digital world, Intuit’s Quicken and Microsoft’s Money are the two leading personal financial software programs, and they are a good place to start looking for information about an individual’s assets and liabilities. Tax return software, such as TurboTax, TaxCut, and Tax Act, as well as electronic copies of tax returns, are excellent sources of an individual’s financial information.

Not only banks, but also brokerage firms, credit cards, lenders, and other billers increasingly are offering Internet accounts that can be used to check balances, pay bills, and review statements. After these financial accounts are identified, Internet access to the accounts may be convenient for family members and fiduciaries, but Internet access is not necessary. Instead of obtaining Internet access to financial accounts when an individual becomes incapacitated or dies, the appropriate fiduciary instead can contact the financial companies in person or by mail to arrange for convenient access to statements, to authorize control or transfer of assets, and to pay for liabilities. It is also important to check on automatic deposits and bill payments as soon as possible and stop automatic transactions, if necessary.

To prevent fraud or unauthorized access, it may be prudent to change the individual’s passwords to the Internet accounts or shut off Internet access to those accounts entirely.

**Online Sales Accounts**

Another time-sensitive task is locating information about the individual’s online sales activities. Whether the individual runs an online sales business or just sells an occasional personal item, online sales may be in process when an individual becomes incapacitated or dies. Monitor the individual’s e-mail accounts and text messages for announcements about sales transactions.

The individual may operate an online business selling goods or services. That business may have a dedicated Web page or a virtual storefront on Ebay, Amazon, or other Internet services. The business may have employees, suppliers, customers, income, and expenses that need urgent attention to avoid breaches of contracts. Timely access to the Internet accounts may be critical to keep the business operating smoothly. If a business entity owns the online accounts, the appropriate business representative should contact the Internet services to gain access to accounts or to reset passwords. If it is a sole proprietorship or the individual owns the online accounts outside of the business, the appropriate fiduciary should contact the Internet services to gain access or reset passwords. Like any other business, the appropriate representatives should consider whether the business should be continued, sold, or shut down. Even if the business is run completely by the individual and only has an Internet storefront, it may need to be listed as a guardianship, conservatorship, probate, or revocable trust asset and listed on an estate tax return if a return is necessary.

Many individuals buy and sell occasional personal items at an online auction site like Ebay or an online classified ad site like Craigslist. These transactions also may require time-sensitive actions and responses to avoid a breach of contract, which makes planning for access to these online sales accounts critical. Existing offers to sell items may need to be cancelled in light of an individual’s incapacity or death, especially if necessary to comply with guardianship, conservatorship, or probate laws and procedures. With online sales, the purchase price for the sale may be transmitted from the buyer to the seller using another Internet service like PayPal. Even if there are no items currently listed for sale, it’s important to check whether the individual has a balance in his PayPal account or accounts at similar online payment services that may need to be listed as a guardianship, conservatorship, probate, or revocable trust asset and listed on an estate tax return if a return is necessary.

**Web Pages and Blogs**

An individual may operate one or more Web pages or blogs. As most people know by now, a blog is a personal or business Web page with individual postings of news items, reviews, or personal comments about a particular topic. For example, Politico is a blog with frequent updates about Washington politics.

The content on personal Web pages and blogs may have personal value to family members and friends. Most of this content is available to anyone over the Internet, as long as the Web page or blog
hosting agreement remains in force and the fees for hosting, if any, are paid. As with other Internet accounts, whether the passwords to update the content of these personal Web pages and blogs can be reset and whether the accounts can be transferred depends on the hosting company’s terms of use agreement.

Personal Web pages and blogs can generate revenue, which can make them valuable assets. These sites may generate revenue by selling advertisements on their pages; this revenue is typically based on the volume of unique visitors and the number of pages that they view. Some advertisers pay only for the actual number of times a visitor clicks on the advertisement link, regardless of how many visitors see the ad. In other words, an individual’s personal blog that describes his experiences on a driving trip to Florida with his parents and two younger brothers, even though it may contain a humorous anecdote or two, is probably not going to generate a large number of unique visitors or page views. Personal Web pages and blogs probably will not generate significant advertisement revenue.

On the other hand, highly popular Web pages and blogs can be very valuable. Celebrity gossip Perez Hilton runs a blog that has an estimated 5.5 million unique visitors per month, a volume estimated to generate advertising revenues of $8.8 million per year. His blog is worth an estimated $32 million in 2009—which is down by about 50 percent from last year because of the depressed economy’s impact on advertisement spending. Yet, of course, without Perez Hilton, the blog may be worthless.

If an individual is critically ill or incapacitated, the individual’s Web page or blog may be a convenient way to inform family members and friends of the individual’s status and progress. If the individual does not already have a Web page or blog that would be suitable for this purpose, CaringBridge is a non-profit Web service that allows family members to post updates about an individual’s critical illness and allows friends and family members to reply with messages of care and support. According to their Web site, more than 30 million people have visited their site in the past year.

Social Networking Accounts

Social networking sites such as MySpace, Facebook, LinkedIn, Twitter, and similar sites enable individuals to communicate and interact easily. In a recent survey of U.S. adults who use social networking accounts, 28 percent use them to promote themselves or their work, 28 percent use them to make new business or professional contacts, and 89 percent use them to stay in touch with friends. In this survey, 37 percent of adults visit their social networking pages at least once per day. Clearly, an individual’s social networking account is a powerful tool for communicating about the individual’s incapacity or death.

If the individual has not left the social networking account password but you have access to the individual’s primary e-mail account, the appropriate fiduciary or family member may be able to recover the account’s password by using that social networking site’s system for recovering a lost password. If that does not work, MySpace and Facebook, the two most popular social networking sites, will not provide the password of a deceased user to anyone under their current policies. Both services allow family members to close a decedent’s account or to leave it open as a memorial where friends and family can leave messages. Other Web sites have been created for the primary purpose of posting online obituaries and memorials, such as Legacy.com, Last-Memories.com, and Gates of Remembrance. Some of these Web sites even have online obituaries and memorials for pets.

Domain Names

Registered domain names are the words, letters, or numbers that we use to refer to an Internet address, such as Google.com or Yahoo.com. An individual or business can register an available name with a domain name registrar for a fixed period of time, typically one or two years. If the domain name is popular or valuable, it is important to track down the individual’s domain names soon after incapacity or death. In an interview on National Public Radio’s All Things Considered program, broadcast on May 11, 2009, John W. Dozer, Jr., a Virginia attorney, described a case in which hackers stole a decedent’s domain names before the beneficiaries of the estate knew about them. In that case, the law firm was able to help the estate recover all of the domain names.

If the family members or fiduciaries want to retain an individual’s domain names, it’s important to check when the domain names expire using a “whois” service available at almost any domain name registrar’s Web site. If you do not know which domain names an individual owns, some companies, such as DomainTools.com, offer a fee-based search of domain names by the registrant’s name, e-mail address, home address, or telephone number. But if
an individual registers a domain name privately, these search tools may not find anything connecting the individual to the domain names. Look through credit card statements and checking account statements for annual payments to domain name registrars in order to find the companies that may have privately registered domain names on behalf of the individual.

The vast majority of domain names have little or no value to third parties. But a domain name can have significant value if it is a popular Internet search word or phrase, a word or phrase useful for selling goods and services, or a company brand name. According to midFlux, a company that provides domain name appraisals, some of the most valuable domain names that have been sold are Business.com ($7.5 million in 2005), Diamond.com ($7.5 million in 2006), and Beer.com ($7.0 million in 2004). Adult-oriented domain names have sold for even larger amounts. A domain name appraisal is not very expensive—usually $30 or less for a typical domain name. Note that a domain name is valued separately from the content of the Web page or other services offered through that domain name. If the family or fiduciary wants to sell the individual’s domain names, they can sell them on Internet sites dedicated to domain name sales, such as Sedo or Afternic, or they can be sold at general Internet marketplaces such as eBay.

**IP Rights**

There can be significant value in the IP rights attached to pictures, music, movies, literary works, Web pages, computer code, and other creative works existing as digital property. According to the U.S. Patent and Trademark Office, IP in the United States is worth more than $5 trillion.

Obviously, when dealing with an individual’s incapacity or death, the family members and fiduciaries should consider the value of the person’s digital IP, especially if the person worked as a writer, photographer, artist, musician, inventor, or in a similar profession. Look for Internet accounts on Flickr, SmugMug, and other picture-sharing sites. Look for Internet accounts on YouTube and other video-sharing sites. Also look through financial records for revenues from Internet sites that license photos and artwork, sell songs to download, and offer eBooks and other written works for sale.

**Video Games, Virtual Worlds**

Family members and fiduciaries may not consider online video game accounts or accounts in virtual worlds to be valuable property, but they can be. With online video games, the time and effort involved in building a powerful character or accumulating virtual currency or items in the game has led to a real-world market in the buying and selling of these video game characters as well as their virtual currency and items. Edward Castronova, associate professor of telecommunications at Indiana University, in a May 2009 interview with CNN, estimated that $1 billion per year is converted into virtual currencies, primarily for video games.

One of the most popular online games is World of Warcraft. In September 2007, a character in World of Warcraft sold for an estimated 7,000 euros (about $9,500 at that time). If the incapacitated or deceased individual spent a significant amount of time playing any popular online video games, check whether the game character or virtual currency or items are valuable assets that should be inventoried and transferred.

The Pew’s recent survey found 35 percent of adults who use the Internet play online video games, but only 2 percent visit a virtual world, such as Second Life. But individuals who are active in Second Life average about 40 hours a month in this virtual world. As with online video games, there is a real-world market to buy and sell virtual world items among users. Second Life sells virtual real estate directly to users. Owning a small parcel of land in the virtual world is free, but an upwardly-mobile virtual citizen can spend real dollars to live the virtual life of luxury. For $1,000 plus a $295 monthly maintenance fee, a user can buy his own private island from Second Life to own, control, and rent to other users. Top users transact business in the virtual world, such as selling virtual real estate, fashion items, and home furnishings. A handful of the most successful virtual entrepreneurs exchange their virtual currency for more than $1 million per year in the real world.

**Housekeeping**

Now is the time for attorneys to contact their clients to arrange a digital audit.

To conduct this audit, create a form that gathers the names of all accounts, passwords, and other key information. Make sure every family member fills
one out and puts it in a sealed envelope. That includes children living at home.

The best practice is for clients to keep a list of accounts and passwords continuously updated using computer software or an Internet-based service. Then the sealed envelope only needs to hold the information required to access the client’s electronic list—and that won’t change as frequently.

Attorneys are uniquely situated to hold this sensitive information securely for clients. But carefully consider potential conflicts of interest when representing multiple family members. To protect client confidences and ensure that key people have access to this information when needed, make sure each person indicates on his form who is authorized to receive his list upon his death or incapacity.

For all estate planners, digital recordkeeping should now be considered a basic step in the intake process for new clients and a basic step in every periodic review for existing clients.

Endnotes

1 Ninety-four percent of adults with a household income of $75,000 or more a year use the Internet at least occasionally, according to Demographics of Internet Users, PEW INTERNET & AMERICAN LIFE PROJECT, January 6, 2009, http://pewinternet.org/Static-Pages/Data-Tools/Download-Data/-/media/Infographics/Trend%20Data/January%202009%20Updates/Demographics%20of%20Internet%20Users%201%206%2009.jpg.

2 Across all income levels, 74 percent of adults use the Internet at least occasionally, according to Sydney Jones and Susannah Fox, Generations Online in 2009, PEW INTERNET & AMERICAN LIFE PROJECT, January 28, 2009, http://www.pewinternet.org/-/media/Files/Reports/2009/PIP_Generations_2009.pdf, at 5. Also, of adult Internet users, 91 percent send or read e-mail, 71 percent buy something online, 68 percent buy or make a reservation for travel online, 55 percent bank online, and 35 percent use an online social networking site.


13 Gmail Help—Accessing A Deceased Person’s Mail, http://mail.google.com/support/bin/answer.py?answer=14300 (Google requires a death certificate, your relationship information, a copy of an e-mail from the decedent to you, and proof that you are a lawful representative of the decedent, and you can begin the process by faxing this information to Gmail User Support at (650) 644-0358).


16 Darrow & Ferrera, supra note 16.
23 Id.
24 Id.
28 Id.
30 Silver, supra note 11.
34 Id.
40 Jones & Fox, supra note 2, at 5.