by Vanessa Kier

We've all heard how essential it is to back up our files regularly. No one wants to become the next urban legend, where the author loses her entire manuscript because her computer fails and she doesn't have a backup copy.

You can avoid this situation by creating a comprehensive data backup plan.

The first step in avoiding data loss is to make certain you're hitting Save often while working. Also make sure that you set your program to automatically save every few minutes. This way, if your program freezes and you have to reboot, there's less chance of losing a large amount of data.

Files current? Good. Now let's talk about creating that backup plan. Your plan should address why, where, what, and when you are backing up your data.

Why?

Backing up your files gives you access to your data under several scenarios.

Total loss

Suppose your home is hit by a natural disaster such as a flood, fire, or earthquake. You have to evacuate. When you return, you can't find your computer. Or you do find your computer, but it's so damaged not even an expert can retrieve data from it.

Maybe your laptop is stolen while you're traveling. Or your desktop is smashed beyond repair during a breakin.

Perhaps your hard drive is ruined when you accidentally spill coffee on it.

If you haven't backed up your data and one of these scenarios hits, you will have to start from scratch when you get a new computer.

Partial Loss

A computer virus corrupts all or some of your data.

You drop your laptop so that the screen is so cracked it doesn't work. Leaving you with a lovely keyboard, but no way to view your data.

Your partner, while reorganizing the computer files, accidentally drops your WIP folder into the trash, then empties the trash before he realizes what he's done.

In these cases, the data is still on your computer and your computer is physically accessible to you. There are ways to retrieve the data in all of these situations. Yes, you can even have an expert retrieve trashed data, although the success rate is highest immediately after the files have been deleted.

However, if you have adequate backup, you can be up and running much sooner. And without the extra expense.

Mobility

You've just lost power in your home. Your only computer, your desktop, is now useless. You're on deadline. The library has power and it has computers you can use.

You're going home for the holidays. You can't bring your desktop. But your brother-in-law says you can work on his laptop.

If the current version of your WIP is backed up onto a portable media device, you can easily work on any compatible computer.

Where?

Now that you know what types of scenarios require backup, assess the level of risk to your data. Take a look at your environment and your lifestyle. Think worst case. You might live in hurricane territory, but that doesn't mean your home couldn't be subject to a kitchen fire that spreads, destroying your home and your computer. Or maybe you live in a high-crime area, so protecting against theft is a high priority.

Once you've determined the type of risk you're guarding against, you need to pick a backup location. There are two components to consider here: media type, and media location.

Media Type

What physical media are you going to choose to save your data onto? A DVD? An external hard drive? A flash drive? Remote servers hosted by a backup service? The one thing you never want to do is back up your data onto your base computer.

What type of media you choose will be dependent mainly on how much data you need to store, and whether you want the media to be portable. If you are backing up all of your data you will need a storage device with a large capacity. An external hard drive can store more data than a portable flash drive. But the flash drive is easier to fit in your purse if you just want to access your WIP from any computer.

Also make certain that you keep up with new storage trends. A backup doesn't do you any good if you can no longer access the data due to obsolescence. I have lots of old stories residing on 3½" floppy disks, yet my new computer didn't come with a floppy drive. After a bit of research, I was able to purchase an external floppy drive. If I'd needed to read data off a 5.25" black vinyl disk I probably would have needed to send the disks to a professional for retrieval. So keep up with new media trends and make certain you are backing up onto a device that you'll be able to access easily given today's technology.

Another consideration on media type is switching computers from PC to Mac or vice versa. If this is a possibility, make sure you back up your data onto a device that can be read by both types of computer.

Media Location

Okay, so let's say you've backed up your data onto an external hard drive. If it's sitting on the floor next to your computer when an earthquake strikes, you're in danger of losing both your original data and the backup.

To be able to restore your data in the case of a natural disaster, you need to store your data in a secure location. Preferably away from your base computer. An in-home data safe rated for fire, impact and theft can protect your backup media from many natural disasters. But what if you're not allowed back to your home for several days? Weeks? Can you wait that long to retrieve your data?

If not, consider a safe deposit box. Not all media will fit inside the smaller ones—a large external hard drive won't fit in my safe box—but the bank's vault will not only be protected against disaster, but as an essential community service, after an emergency the bank should be physically accessible sooner than residential areas.

A portable media device, such as a flash drive that you keep in your purse, will allow you retrieve your data quickly. This is great if you want to work on your WIP on a friend's computer. However, you probably won't have room to keep all your files backed up onto one flash drive. Also, what happens if your purse gets stolen? There go your backups.

Online backup services, particularly if their servers are located in a different state, provide the easiest access to your data. All you need to retrieve your information is a computer with internet access, your login information, and the time to download all your files.

Where you store your data also depends on how disciplined you are. With an online backup service you can set it to back up at regular intervals as long as you're connected to the internet. If you're using backup software to save onto an external hard drive or flash drive, you can set your backup software to do automatic backups, but then you have to remember to put the storage device somewhere safe at the end of the day or risk losing your data should disaster hit overnight.

What?

Do you really need to back up all of your files? Only you can make that decision, but it all comes down to what your priorities are.

If someone destroyed your computer right now, what data would be the most difficult to replace?

For most writers, I'm guessing our WIP would top the list, followed by every other piece of writing we've done.

What about your financial data? Most institutions keep several months of statements accessible online for downloading, but if you've been tracking your finances for years there might not be any quick way to replace all that data without locating old statements and reentering it.

Do you have hard copies of your photos? Did your music come from CDs or tapes that you own, or was it downloaded?

Are your e-mails kept on your provider's server? Or do downloaded messages reside only on your computer?

Make a list of all the types of files on your computer and rank them based on their importance to you and how easily they can be replaced. Then use this list to decide whether you want to back up all of your files or just some of them.

When?

How often should you back up?

It depends on both the priority you've assigned the data and the ease of the back up process.

Take a look at your data priority list. The items at the top of your list should be backed up daily, or at least every time you make changes. Items that are lower priority can be backed up less frequently.

After you've done the initial data backup, most backup programs will perform incremental daily backups, which means they back up only the files you've worked on since the last session. You can also choose which files get backed up at a certain time, and alter this list as your priorities change.

If you're using a backup software, it's easy to start the backup and then walk away. Or set the software to run in the background while you're working. If you have to manually drag and drop your data files onto your storage device, not only do you have to be disciplined enough to remember to do this regularly, but the process can take longer.

You have to decide what frequency you're most comfortable with to give you peace of mind.

One Last Consideration—Redundancy

Okay, so you've created a backup plan. You know why, where, what, and when you're backing up your data. But is one backup copy enough? Maybe not.

All computers can fail or be destroyed. What if you're backing up online and something happens to the backup company's computers? What if there's a natural disaster and your computer is lost, but when you go to your safe

box to retrieve the external hard drive that contains your backup, you discover that the drive has been corrupted and you can't retrieve any data? What if you've been saving your data to a second computer in your home and both computers are destroyed in a flood?

Because there is always the potential for hardware failure, businesses often insist on redundant backups. That online backup service mentioned above is certain to have various layers of redundant backup in place in case something happens to their main computers.

Go back to your priority list. Any data you can't easily replace should be backed up to more than one media device and those devices spread to various locations, cutting down on the chance of one disaster taking out both your base computer and all your backups.

Conclusion

There are as many possible permutations of data backup as there are individuals.

Here's just one example of a comprehensive backup plan.

Why: This backup plan will safeguard against data loss in the event of fire, water (including water from fire hoses), earthquake, accident, or theft. It will also allow access of key files on-the-go.

Where: Media types: Flash drive. External hard drive. Online backup server. Media locations: Data safe in home, safe box, purse/pocket, online backup company's servers located out of state.

What: WIP, personal documents, e-mail and financial data are top priority. Photos, being unique and without paper backups, are also high priority. Music, which is easily replaceable, is low priority.

When: Key files will be backed up daily onto a flash drive, to be kept in purse or in pocket. Backup onto external hard drive of changes made to files will occur automatically every hour while working, with hard drive being stored in data safe when not in use. External hard drive will be switched out monthly with second external hard drive in safe box. Entire computer will be backed up nightly through an online backup service.

Yes, that's my backup plan. I'm pretty obsessive about following it, although the safe box switch out doesn't happen as often as it should. Still, this should give you an idea of how you can structure your own data backup plan.

Remember, whatever backup plan you come up with, you need to be able to gain access to those files easily should the worst case scenario happen. And if your backup is compromised, you want to have at least one more backup to turn to.

Good luck, and may you never need to recover your data!

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